S. HRG. 99-907 PT. 3

# AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1987

## HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

NINETY-NINTH CONGRESS

SECOND SESSION

ON

## H.R. 5177

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1987, AND FOR OTHER PURPOSES

## PART 3 (Pages 1-546)

NONDEPARTMENTAL WITNESSES

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# AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1987

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TUESDAY, MAY 6, 1986

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.*

The subcommittee met at 9:40 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Bumpers, Harkin, Kasten, Mattingly, and Specter.

## NONDEPARTMENTAL WITNESSES

### SUBCOMMITTEE PROCEDURE

Senator COCHRAN. The subcommittee will please come to order.

For the past several weeks, our committee has been hearing testimony and reviewing comments and observations of representatives of the administration with respect to the budget for the Department of Agriculture and related agencies for fiscal year 1987.

Today we turn to testimony from members of the general public who wish to be heard and from Members of Congress who wish to express themselves, with regard to the activities of the Department of Agriculture and the appropriate levels of funding that may be needed to carry out the programs and activities of this important governmental department.

I think this aspect of our hearings plays a very important, vital role in the process. I feel that we benefit from the comments and suggestions which reflect experience and practical knowledge, in guiding us to the correct decisions regarding the levels of funding for these activities of the Department of Agriculture and related agencies.

We have a large number of persons who have requested an opportunity to testify. Because of that we have had to allocate four separate hearing sessions to this effort. We have written statements which have been submitted to us. We appreciate those and they will be incorporated in the record in full. So, we request that witnesses make such summary comments or highlight their statements any way they choose, but we will have only 5 minutes allocated to each witness for verbal testimony, in order to allow enough time for everybody who wants to testify.

We should point out that the subcommittee cannot receive any copyrighted material, unless arrangements have been made in advance by the witness to obtain permission of the copyright owner of those materials for their use. This notice is given to protect the copyright owners, as well as the subcommittee and witnesses.

## AMERICAN HOME SEWING ASSOCIATION

### STATEMENT OF MORRIS JARVIS, PRESIDENT, HANCOCK TEXTILE CO. ACCOMPANIED BY JOHN S. CHWAT, WASHINGTON REPRESENTATIVE

Senator COCHRAN. Our leadoff witness today is Mr. Morris Jarvis, who is president of Hancock Textile Co., from Tupelo, MS. He is representing the American Home Sewing Association. We appreciate your presence as our leadoff public witness. We request that you proceed in any manner you wish.

Mr. JARVIS. Thank you, Mr. Chairman and members of the subcommittee. I am accompanied today by John Chwat, the Washington representative for the association.

Our association is the only organization which represents the entire home sewing industry in the States, including such areas as fabrics, fibers, patterns, notions, trimmings, sewing machine manufacturing, retailing, wholesaling, and publishing. Today, the home sewing industry generates over $3.5 billion in sales annually through about 20,000 retail stores serving over 40 million home sewing consumers across the country.

In addition, over 40,000 educators, junior and senior high school teachers, college professors, extension home economists, and retail educators are actively engaged in sewing skill development.

Mr. Chairman, the administration has proposed a $202.7 million reduction from last year in the fiscal year 1987 U.S. Department of Agriculture's Extension Service budget. These reductions would virtually assure the elimination of all Extension Service clothing and textile specialists and also the sewing education program that serves hundreds of thousands of our citizens throughout the Nation. These Extension Service education programs are critical to the sewing and textile industries.

We, therefore, recommend that this subcommittee restore the proposed Extension Service cuts and appropriate the full $342.7 million, which is the same as last year, for all Extension Service programs.

To illustrate the importance of the Extension Service clothing and textile programs, let me use the example of our home State of Mississippi, and I am sure you can understand and appreciate this. Under the leadership of Dr. James Carpenter, who is the director of the Mississippi Cooperative Extension Service, and Beth Duncan, who is an extension clothing specialist at Mississippi State University, 92,000 adults participated in 1985 in Mississippi clothing and textile programs and 6,136 young people conducted 4-H clothing projects. Eighty-one counties in the State conducted a total of 1,500 clothing programs in

1985 with families, working women, homemaker clubs, organizations, teachers, retailers, and young families regarding clothing construction, clothing selection, and textile care.

### EXTENSION'S COMMITMENT TO SEWING EDUCATION

The American Home Sewing Association recommends full funding for the Extension Service this year. We have a concern relating to the Department of Agriculture's commitment to clothing and textile programs. We believe that the Department of Agriculture has ignored the House subcommittee's directive of last year, found on page 38 in House Report 99–211 in which Congressman Jamie Whitten's subcommittee recommended that, "The committee also calls on the Extension Service to give expanded attention to home sewing as part of the extension program."

Despite the attempts by the industry to enhance clothing and textile Extension Service programs and to propose joint industry-USDA sewing education programs, the Extension Service has not been responsive. In fact, on September 22, merely 2 months after the subcommittee issued the report language which I have just referred to, the Extension Committee on Organizational Policy adopted the following statement:

> While it is recognized that clothing construction is one alternative for extending resources of families, the area of diet, nutrition, and health is the No. 1 priority for extension home economics programs. This priority is consistent with both the Joint Council and Users Advisory Board. Current limited resources do not allow time for professional staff to teach clothing construction to large numbers of people.

While sewing education is a popular course for adults and young people, the industry has found that there is a growing trend that sewing is not being taught regularly in our schools and is being ignored by various State levels, as well as in the USDA. Soon, a whole generation may be without this important skill.

In summary, we would like to recommend that an appropriation for fiscal year 1987 be made in the full amount of $342.7 million, which is the same as last year, and that language should be included in the subcommittee report which directs more emphasis on clothing and textile programs during the next fiscal year.

Thank you.

Senator COCHRAN. Thank you, Mr. Jarvis.

To what extent is the business that you represent involved in this general area? What does the Hancock Textile Co. actually do?

Mr. JARVIS. We are a retail chain that sells fabric and sewing notions all over America. We have 328 stores between Florida and Washington State and as far north as Minnesota.

We are very active in the retail end of the business. We have a wholesale warehouse in Tupelo that supplies our stores plus about 150 independent retail stores.

Senator COCHRAN. Is this general area of business activity in a decline or is it a growth area?

Mr. JARVIS. It has been in a decline for the last 8 years. It seems to have bottomed out a little bit now and actually the mom-and-pop type stores are showing a little bit of increase the last 2 years.

Senator COCHRAN. I know I had an aunt who had a store in Hattiesburg, MS, selling cloth and sewing materials and that kind of thing. I think it was part of a chain. She is not in that business any longer. She is retired. But I can remember going to visit her store when I was younger. I found all that quite interesting.

So, members of my family have been involved in that business, and I am somewhat familiar with it because of that.

Mr. JARVIS. We work consistently with the Extension Service all over the country in promoting the teaching of home sewing. We actually have our own home economists in the different cities across the Nation.

Senator COCHRAN. Well, I appreciate your taking the time to come in and testify this morning. It is good to get to see you, and we appreciate the benefit of your comments very much.

Thank you.

Mr. JARVIS. Thank you.

[The statement of Mr. Jarvis follows:]

## STATEMENT OF MORRIS JARVIS

Mr. Chairman and members of the Subcommittee, I am Morris Jarvis, President of the Hancock Textile Company located in Tupelo, Mississippi, and a member of the Board of Directors of the American Home Sewing Association. I am appearing before you today on behalf of the 600 corporate and retail members of the Association.

Our Association is the only organization which represents the entire home sewing industry in the United States, including such areas as fabrics, fibers, patterns, notions, trimmings, sewing machine manufacturing, retailing, wholesaling and publishing. Today the sewing industry generates over $3.5 billion in sales annually through 20,000 retail stores serving over 40 million home sewing consumers. In addition, over 40,000 educators, junior and senior high school teachers, college professors, extension home economists and retail educators are actively engaged in sewing skill development.

All of these businesses and all of these people -- manufacturers, wholesalers, retailers, educators and consumers -- are the beneficiaries of educational programs that have taught sewing skills to millions of Americans and which, in turn, have created job opportunities for them and have enhanced the quality of their family life.

Mr. Chairman, the Administration has proposed a $202.7 million reduction from last year in the FY 1987 U.S. Department of Agriculture's Extension Service budget. These reductions would virtually assure the elimination of all Extension Service clothing an textile specialists and sewing education programs serving hundreds of thousands of citizens throughout the Nation. These Extension Service education programs are critical to the sewing and textile industries. We therefore recommend that this Subcommittee restore the proposed Extension Service cuts and appropriate $342.7 million, the same as last year's funding level, for all Extension Service programs.

While clothing and textiles represent a modest portion of the existing Extension Service education programs, clothing is a basic necessity of life, and therefore, sewing and clothing-related programs take on an economic importance to our society that far exceeds that of other desirable but less fundamental programs. Sewing skills enable people to lower their expenses for clothing and to obtain income through utilization of their sewing skills by performing part- or full-time sewing related work. People do not need extensive facilities or equipment to make clothes.

Since sewing is a learned skill, people need to be taught the basic skills necessary to transfer design concepts and fabric into useful products either for their own use or for sale to others. Given the problem of high unemployment in some areas, the importance of providing programs that will serve the special clothing needs of targeted population groups is critical.

To illustrate the importance of the Extension Service clothing and textile programs, let me use the example of my home State of Mississippi, which I am sure the Chairman will also appreciate. Under the leadership of Dr. James Carpenter who is the Director of the Mississippi Cooperative Extension Service, and Beth Duncan, who is an Extension Clothing Specialist at the Mississippi State University, 92,000 adults participated in 1985 in Mississippi clothing and textile programs and 6,136 young people conducted 4-H clothing projects in 1985. Eighty-one counties in the State conducted a total of 1,500 clothing programs in 1985 with families, working women, homemaker clubs, organizations, teachers, retailers and young families regarding clothing construction, clothing selection and textile care.

This record of Extension Service involvement in clothing and textiles is not confined to Mississippi. Several examples deserve special mention. For the previous three years, the Cooperative Extension Service at the University of Massachusetts has sponsored an annual "Sewing as a Business" conference for hundreds of attendees from around the State. The Virginia Cooperative Extension Service developed a "Sew Master Program" to train and certify volunteers who qualify to teach sewing education programs. In many areas of that state, the Extension Service is the only source for clothing-construction educational information.

At present, the home-sewing industry cooperates with the Extension Service through corporate sponsorship of specific programs in the 4-H area. For example, in 1983 over 408,000 4-H students enrolled in clothing courses and over 175,000 participated in a Fashion Revue program. Both of these programs are economically suppported by our industry.

The American Home Sewing Association recommends full funding for the Extension Service this year. We also have a concern relating to the Department of Agriculture's commitment to clothing and textile programs. We beleive that the Department of Agriculture has ignored the House Subcommittee's Directive of last year, found on page 38 in House Report 99-11 regarding H.R 3037 (which appropriated funds for FY 1986), in which Congressman Jamie Whitten's Subcommittee recommended that:

> "The Committee also calls on the Extension Service to give expanded attention to home sewing as part of the extension program."

Despite attempts by the industry to enhance clothing and textile Extension Service programs, and to propose joint industry-USDA sewing education programs, the Extension Service has not been responsive. In fact, on September 22, 1985, merely two months after this Subcommittee issued the Report language which I just referred to, the Extension Committee on Organizational Policy (ECOP) adopted the following statement:

> "While it is recognized that clothing construction is one alternative for extending resources of families, the area of diet, nutrition, and health is the number one priority for extension home economics programs. This priority is consistent with both the Joint Council and Users Advisory Board. Current limited resources do not allow time for professional staff to teach clothing construction to large numbers of people."

While sewing education is a popular course for adults and young people, in the industry has found that there is a growing trend that sewing is not being taught regularly in our schools, and is being ignored by various State levels as well as in the USDA. Soon a whole generation may be without this important skill.

In summary, the American Home Sewing Association recommends the following specific points to the Subcommittee:

1. An appropriation for FY 1987 should be made to the extension service for $342.7 million (the same level of funding as last year); and
2. Language should be included in the Subcommittee Report which directs the USDA place more emphasis on clothing and textile programs during the next Fiscal Year.

## NATIONAL EXTENSION ADVISORY COUNCIL

### STATEMENT OF HANKY BROADAWAY, PAST PRESIDENT, ARKANSAS EXTENSION HOMEMAKERS COUNCIL, ARKANSAS DELEGATE TO NATIONAL EXTENSION ADVISORY COUNCIL, AND HOMEMAKER AND COMMUNITY LEADER

Senator COCHRAN. Our next witness is Mrs. Ernest Broadaway of Jonesboro, AR. Mrs. Broadaway is also here to testify concerning the Extension Service. We welcome you, Mrs. Broadaway.

Mrs. BROADAWAY. Thank you, Mr. Chairman. I appreciate the opportunity to speak before the committee.

I am Hanky Broadaway. I live in Jonesboro, AR. I am a native Mississippian. I am a product of the Extension Service. I have had the opportunity to learn skills in clothing, food and nutrition, management of resources, stress management, and parent education, to name a few, to help me in my role as wife and homemaker and to handle the problems of every day living.

I have developed leadership skills which have helped me as a community leader and to serve as the president of the Arkansas Extension Homemakers Council, one of the largest educational organizations for volunteers in Arkansas.

The strength of this Nation depends on its ability to feed, clothe, and house its people. The Extension Service is a viable network that links science and technology to the needs of people where they live and work and has had a significant impact on the lives of people through programs in home economics, agriculture, 4–H, and youth development, and rural development.

The family farm and the farm family are experiencing financial crisis and much stress. This segment of society has the tradition of stability. Yet personal stress and tragedy has led to child and spouse abuse, murder, suicide, and family breakups for farm families. Extension has developed programs in response to this situation.

Consumers in both rural and metropolitan areas are beneficiaries of the Extension Service. They have benefited from Extension efforts, improved their diets and health, reduced their medical costs, improved their ability to manage finances in the household, helped them to be better parents, and increased the stability of the family unit, to name a few.

The Arkansas Extension Homemakers Council is part of the educational program in Extension home economics at the University of Arkansas Cooperative Extension Service. Extension home economists are the paid professionals under the University of Arkansas Cooperative Extension Service, and Extension homemakers are volunteers.

The council represents approximately 17,000 Extension homemakers involved with 985 Extension homemaker clubs in the State's 75 counties, where the county and local clubs are affiliated with the County Extension Homemakers Council and County Council is affiliated with Arkansas Extension Homemakers Council.

## EXTENSION HOMEMAKER CLUBS

Extension homemaker clubs are the community organizations through which the program is conducted. An Extension homemaker club is a group of people who meet on a regular basis to participate in educational programs and home economics. These educational programs may be on such subjects as food and nutrition, family economics, clothing, textiles, housing, home furnishing, household equipment, human development, family relations, consumer education, health education, crafts, and public affairs issues that affect the family and other related areas. Leader training lessons provide Extension homemaker clubs with most of their educational programs. County Extension agents, home economists, and other qualified persons present the information to leaders. The club selects one or two members to receive this special training with the understanding that they present the information to their local club and they are the leaders.

Extension homemakers are actively involved in other educational activities as volunteers with the Extension Home Economics Program. While the main purpose of Extension homemakers is education, many Extension homemaker clubs and county councils have community service projects. These projects vary but have included staffing in the area at the local grocery store to consult with consumers on utilization of Arkansas products, such as rice, broilers, turkey, beef, strawberries, et cetera, and teaching clothing workshops to youth, working women, and limited resource homemakers.

Scholarships for university or vocational technical students or women who are entering or reentering the work force, sponsoring diabetes testing, restoring our community landmarks, community classes on selection and use of the home computer, establishing a child care cooperative for working women, immunization program, and some of the community projects require only time while others may involve fundraising.

The educational program of Extension homemakers is conducted under the leadership of the County Extension home economist. Subject matter specialists in home economics from the State Extension Office furnish county personnel with sound, current, scientific, and technical information relative to pertinent development in their respective fields. Guidance to county programs is given by the district program leaders. The State home economist serves as statewide advisor to, and is responsible for, educational activities of the Arkansas Extension Homemakers Council.

I request that funding for the Extension Service be fully restored and that the wording related to Extension clientele in the present Smith-Lever Act be retained. An increase in funding would allow further expansion of programs which have benefited millions like me throughout the United States.

Senator COCHRAN. Thank you very much, Mrs. Broadaway. You came out right on the button of 5 minutes. You must have practiced that. I appreciate your keeping your testimony within the alloted time. It is a matter of courtesy for others and for the committee.

It is good to have the benefit of your practical experience and knowledge of the programs and activities of the Extension Service. I think it will prove helpful to the committee as we review the budget this year. Thank you very much for being with us.

[The statement of Mrs. Broadaway follows:]

## STATEMENT OF HANKY BROADAWAY

Good morning, Mr. Chairman and distinguished members of this subcommittee. My name is Hanky Broadaway and I am from the small town of Jonesboro, Arkansas, (although I was raised in your state of Mississippi, Mr. Chairman). I am here this morning because of my role as a volunteer for the U.S.D.A. Extension Service. I have been a volunteer for over 30 years. You might say I am a product of the Extension Service. As both a volunteer and program beneficiary, I have had opportunity to learn skills in clothing, food and nutrition, management of resources, stress management, parent education, to name a few, to help me in my role as wife and homemaker and to handle the problems of every day living. I have developed leadership skills which have helped me as a community leader and to serve as the President of the Arkansas Extension Homemakers Council, one of the largest educational organizations for volunteers in Arkansas. I believe in Extension Service and I would like to take a few moments and tell you what I know about it.

The strength of this country depends on its ability to feed, clothe, and house its people. In order to do this, there must be a strong, viable network that links science and technology to the needs of people where they live and work. The Cooperative Extension Service, which a joint effort of the land-grant college system and the United States Department of Agriculture, is this viable nationwide network. The Cooperative Extension Service has and is having a significant impact on people. For example, in Arkansas alone, a state whose population is only 2.3 million, the programs of the Extension Service have reached 1.4 million, or 64 percent of its people in some way. The benefits provided cannot be fully measured in dollars and cents, but the dollars and cents benefits are very real.

The Cooperative Extension Service is an effective national, state, and county partnership. Its basic purpose is to strengthen families and rural communities, to improve agriculture, and to develop youth through the dissemination and application of research-based knowledge.

The budget proposed by President Reagan, including the proposal to allow service to farm operators only, places this partnership in serious jeopardy. His proposal comes at a time when the family farm and the farm family are undergoing a major crisis that is affecting their very existence. Extension, being a flexible organization concerned with helping solve local problems, has adjusted its educational efforts to address these issues. In Arkansas, a series of meetings on increasing profitability in agriculture has been completed. Numerous meetings have been conducted throughout the state on management of stress for the farm family. Extension home economics is implementing a program on home-based business which is designed to help families with alternative incomes and in some instances to increase family income. Volunteers like me work to make the program succeed throughout the state.

Accompanying this situation in the rural areas are personal stress and tragedies--child and spouse abuse, murders, suicides, and family breakups of farm families. This segment of society has a long tradition of stability, and there is concern for our nation's rural areas.

Consumers in both rural and metropolitan areas are beneficiaries of the Cooperative Extension Service. Consumers have experienced lower cost and better quality foods. Also, consumers have benefited and learned from Extension efforts which improve their diets and health, reduce their medical costs, improve their abilities to manage household finances, help them be better parents, and increase the stability of the family unit, to name a few.

A major portion of Extension's Home Economics and 4-H programs has utilized volunteers like me. Extension trains these leaders and provides the knowledge base while volunteers give their time, gain and improve their leadership skills, and make it possible to reach a large number of adults and youth. In Arkansas, data shows that 5,962 volunteers are involved in the 4-H program alone which reached over 62,000 youth, and over 17,700 volunteers extended home economics information which reached more than 1.5 million individuals. These volunteers donated more than 134,000 hours of their time toward helping others.

I want to share with you my personal story about how Extension has had its impact on me. I became involved in Extension programs with only an eleventh grade education and untapped abilities. Not only did Extension given me opportunity to develop these abilities, but it has given me an education and confidence of which I would not have developed otherwise. There are no words to express what Extension has fully meant to me and my family. We have a family livestock operation. We raised five children. My sewing abilities were developed to a professional level through Extension educational programs and have meant enormous financial savings as well as a supplement to the family income over the past thirty years. For example, the following is a list of garments that I have made during the past two years and the estimated cost of these had I purchased them:

| | Cost of Making Garment | Purchased Price |
|---|---|---|
| 20 Western Shirts | $ 120.00 | $ 400.00 |
| 3 After-Five Dresses | 50.77 | 400.00 |
| 3 Short Dresses | 21.00 | 180.00 |
| 9 Blouses | 90.00 | 405.00 |
| 3 Quilted Vests | 18.00 | 180.00 |
| 1 Tablecloth and 8 Napkins | 55.00 | 250.00 |
| 5 Decorative Pillows | 15.00 | 150.00 |
| 7 Skirts | 35.90 | 292.00 |
| 2 Ultra Suede Skirts | 50.00 | 250.00 |
| 1 Ultra Suede Jacket | 50.00 | 300.00 |
| 1 Pebble Ultra Suede Suit | 100.00 | 500.00 |

Total Garments Made 55
Household Linens Made 6
Total Savings of $2,711.33

In addition to the above savings--for each five-day tailoring workshop I teach, I not only help others stretch their family dollars but my family income increases by approximately $180 as the instructor.

Not only were financial savings achieved, but I was the winner of the first "Sew and Cotton" contest held in my county. I received a number of gift certificates plus $100 and all expenses paid to enter and attend the state contest. Winning first place in the suit division of the state contest, I received another $100 and a gift certificate. As the state sweepstakes winner I received a sewing machine which I still use today. By modeling and winning at these contests, my own self-confidence was improved dramatically.

In addition, Extension has helped me with information useful in feeding my family and maintaining the family's health. I learned how to plan nutritious meals on a limited budget, to shop for the best food buys, and to preserve food. When feeding a family of seven on a limited budget, one uses every resource possible to maintain good nutrition and their health.

To extend resources to meet the needs of the family has been a challenge to me. Through Extension I learned how to budget our income and to manage family expenditures so we could live within our means. Programs dealing with estate planning have helped us know how we want to handle our assets upon our death.

Through Extension I have learned to run a smooth household. To save on household expenses I have learned how to make home repairs in and around the house, to replace items, and to decorate the home. I have extended the family budget by knowing how to make drapes, other window treatments, and home accessories which have contributed to our pleasant home environment.

There have been events in my life that have required me to develop coping skills. Within the past two years I experienced the untimely death of my granddaughter, the death of my father, and handling the situation of an invalid mother. Through programs of the Extension Service I have learned how to handle stress and to cope with the everyday problems of life in a health manner.

The Extension Service has provided numerous opportunities for development of my leadership abilities as a volunteer. By being elected to local, district, and state offices, my leadership abilities developed to the point where I was elected to the office of President of the Arkansas Extension Homemakers Council with a membership of over 17,000. The knowledge acquired while holding the different offices afforded me the opportunity to be chosen as a delegate to the National Extension Advisory Council and to the Land-Grant Lay Leaders Seminar. This allowed me personal access to my elected officials in order to tell what the Extension Service has meant to me and my family and to express my concerns about the future opportunities to thousands of people. If the Extension Service funds are drastically cut, this kind of development of people would not be possible.

If you think I am sold on the Cooperative Extension Service, you are correct. I am only one example of many other volunteers from Arkansas and throughout the United States who have benefited from the Cooperative Extension Service.

To drastically reduce or eliminate an organization such as the Cooperative Extension Service to the extent recommended in the president's budget would deprive untold millions of volunteers and beneficiaries of the opportunity to develop as a contributing citizen of society as I have. This is a public education program that should be supported with federal funds to a greater extent than in the past. Therefore, I urge you to restore full funding to the Extension Service and to retain the wording related to Extension clientele in the present Smith-Lever Act. To limit the use of funds and restrict their use to selected clientele groups would be contrary to a basic principle of Cooperative Extension, i.e., local people study their problems and determine needs and Extension personnel develop educational programs to meet those needs. An increase in funding would allow further expansion of programs which I have described.

I have the utmost confidence in Extension personnel and their abilities to serve this great nation if adequate funds are provided, and I trust you also recognize the value of this program to our Nation.

## TEXAS TECH UNIVERSITY

## STATEMENT OF DR. SAM E. CURL, DEAN, COLLEGE OF AGRICULTURAL SCIENCES

## ACCOMPANIED BY DR. ROBERT ALVIN, ASSOCIATE DEAN FOR RESEARCH

Senator COCHRAN. Our next witness is Dr. Sam Curl, who is dean of the College of Agricultural Sciences at Texas Tech University. Dr. Curl, welcome. We appreciate your being here.

Dr. CURL. Good morning, Mr. Chairman. I am Sam Curl, dean of the College of Agricultural Sciences at Texas Tech University. With me today is Dr. Robert Alvin, our associate dean for research.

We are most appreciative for the opportunity to appear before the committee today on behalf of urgently needed research in the area of plant stress and water conservation. A cooperative research effort has been undertaken jointly by the USDA-ARS, Texas Tech University, and the Texas Agricultural Experiment Station to address this very critical problem.

### BACKGROUND FOR PLANT STRESS RESEARCH

The background setting for this research is found in S. Doc. 59, the feasibility study conducted by USDA in 1977, and the statement of Texas Tech University submitted for the record before this committee in 1979.

The Southern Great Plains is one of the most intensely developed and highly productive agricultural regions of the United States. Almost all of the water presently used to support this agriculture comes from a rapidly declining and virtually nonrechargeable ground water reservoir, the vast Ogallala aquifer. Estimates of the future life of the water supply from this formation vary, but all agree that it is finite. Many wells in the southern part of the formation are already going dry. In addition, the escalating cost of energy required to lift the water in a number of areas has become prohibitive.

The need is urgent for genetically improved crop varieties possessing more efficient stress tolerance and improved water use mechanisms and for the development of cultural practices for maximizing water use efficiency.

Our cooperative research program focuses on these objectives. An in-depth statement including an updated report on the progress of the research planning and the program activities to date has been submitted for the record.

Our past testimony has presented a comprehensive assessment of the problem and recommendations for what we firmly believe is a viable and cost-effective Federal/State cooperative research strategy for dealing with this complex agricultural problem facing the Southern Great Plains and the semiarid Southwest.

## PRIOR CONGRESSIONAL ACTION

The committee has shown a concerned interest in the problem we have brought to your attention. In fiscal year 1977, Congress appropriated $100,000 to initiate a feasibility study to determine the most appropriate program and location for the plant stress and water conservation laboratory initially identified in S. Doc. 59. That study was delivered to the Congress in March 1978.

In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University in Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for the laboratory.

The research program plan and the architectural plans and specifications for the laboratory have been completed. A cooperative USDA–ARS research unit is in place in Lubbock occupying temporary space on the campus of Texas Tech University and the Texas Agricultural Experiment Station site north of Lubbock.

In fiscal year 1980, Congress appropriated $200,000 to initiate basic research on the problem. Congress appropriated $400,000 for the research program for fiscal year 1981, $450,000 for fiscal year 1982, $750,000 for fiscal year 1983, $750,000 for fiscal year 1984, $900,000 for fiscal year 1985, and $1,150,000 for fiscal year 1986.

On behalf of all who are working on the problem, we wish to express our appreciation for your past support which has allowed us to get the research program off the ground and moving in a very positive direction.

We believe this program and facility should be of top priority. This is not a program dealing with a single crop or a problem of local proportions. It represents rather a comprehensive investment in the future which will help to avert an economic disaster throughout a portion of over six States wherein a large and very significant portion of our present agricultural productive capacity is found.

## PROMINENCE OF CURRENT PROGRAM

The current research program is recognized as a national center for excellence in plant stress and water conservation research. A technical relationship has been established with the USDA–ARS Plant Gene Expression Center in California. Further evidence of the stature of this program includes first the receipt of a competitive grant of $400,000 of State funding from the Texas Advanced Technology Research Program and, second, charter membership in the newly created Southwest Consortium for Plant Genetics Research.

## RECOMMENDATIONS

With regard to our testimony today, we respectfully request the committee for fiscal year 1987 to increase the level of funding for the cooperative research program in plant stress and water conservation at Lubbock, TX, now in its seventh year, in the amount of $1 million over the current budget allocation for fiscal year 1986. This will bring total research program funding for fiscal year 1987 to $2,150,000.

We further request the committee to authorize funding in the amount of $24 million to construct the proposed plant stress and water conservation laboratory as planned on the site made available for lease to the U.S. Department of Agriculture by the Board of Regents of Texas Tech University.

Information on the proposed laboratory including the architectural design drawings may be obtained from the U.S. Department of Agriculture, Agricultural Research Service.

Mr. Chairman, we appreciate your support and your continuing interest in this extremely important and timely research program. Thank you very much.

Senator COCHRAN. Thank you, Dr. Curl. We do recognize that important work is done at Texas Tech University and at the Texas Agricultural Experiment Station. This area of plant stress and water research is important to our ability to deal with the challenge of the future in agriculture.

I hope that we can find funds to make available for these projects as you request. We are, of course, under a lot of pressure this year in meeting the guidelines and the legal restraints imposed on us by the Gramm-Rudman-Hollings law and the budget resolution, which was just adopted by the Senate.

We have to make some tough choices among a lot of very worthwhile and important activities. We are not going to be able to fully fund everything. Everybody knows that. We will do our best.

Your being here and helping us to better understand what these funds will be used for and why they are needed will certainly be very helpful to the committee.

Thank you very much for being here.

Dr. CURL. Thank you, Mr. Chairman. We appreciate your support.

[The statement of Dr. Curl follows:]

## STATEMENT OF SAM E. CURL

### SUMMARY

**USDA-ARS Plant Stress and Water Conservation Cooperative Research Funding and Construction Authorization for the Plant Stress and Water Conservation Laboratory in cooperation with Texas Tech University and the Texas Agricultural Experiment Station.**

### SUMMARY OF ACTIONS TO DATE

In fiscal year 1977, Congress appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March, 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for Phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. The research program plan, the facility program amendments and the architectural plans and specifications for Phase I of the laboratory have been completed. Plans and final estimates for construction costs for Phase II are near completion. A cooperative USDA-ARS research unit is in place in Lubbock occupying temporary space on the campus of Texas Tech University and at the Texas Agricultural Experiment Station site north of Lubbock. In fiscal year 1980, Congress appropriated $200,000 to initiate basic research. The Congress appropriated $400,000 for the research program for fiscal year 1981, $450,000 in fiscal year 1982, $750,000 in fiscal year 1983, $750,000 in fiscal year 1984, $900,000 in fiscal year 1985, and $1,150,000 in fiscal year 1986.

### SPECIFIC ACTION REQUESTED OF THE COMMITTEE

It is proposed that Congress continue to recognize the urgency of the research indicated by appropriating funds at the level of $1,000,000 over the current budget allocation of $1,150,000 ($525,000 Base Funds plus $625,000 Formal Budget Funds) to this project to continue and strengthen the plant stress and water conservation research program. These funds are to be directed for cooperative research in plant stress and water conservation at Lubbock, Texas involving USDA-ARS, Texas Tech University and the Texas Agricultural Experiment Station. The funds will be used to increase the research effort and to provide a core of scientists which will form the base for a more comprehensive plant stress and water conservation laboratory which has been planned at Lubbock, Texas.

We further request the Congress to appropriate funding in the amount of $24,000,000 for construction of the Plant Stress and Water Conservation Laboratory. This laboratory would be constructed on a tract of land on the campus of Texas Tech University. The Board of Regents of Texas Tech University has authorized the lease of this land to the federal government for the purpose indicated. While recognizing the urgency for reduced federal spending, we believe the investment in this facility is one in which very visible and tangible benefits will be realized within a decade. The full thrust of the research program cannot be realized until the highly specialized facilities included in the laboratory are in place and ready for use by the scientists.

The proposed laboratory represents the most advanced architectural and engineering technology available and will be energy efficient and cost effective. An estimated savings of approximately $1,000,000 will be realized if the facility is fully funded in fiscal year 1987. This is not to mention the time saved in accelerating the full scale buildup to attack the urgent problem. The Plant Stress and Water Conservation Research Program at Lubbock is being recognized as a national Center for Excellence, and the program continues to grow. A technical relationship has now been established with the USDA-ARS Plant Gene Expression Center in California.

### INTRODUCTION

Mr. Chairman, I greatly appreciate the opportunity to appear before the Committee today on behalf of needed agricultural research in the area of plant stress and water conservation. This vitally needed research is encompassed in the comprehensive nationwide research mission of the U. S. Department of Agriculture-Agricultural Research Service (USDA-ARS). An intensified research program will implement the recommendations of the Plant Stress and Soil Water Conservation feasibility study prepared by the USDA-ARS.

The background setting for the problem which the proposed research addresses is found in Senate Document 59, the feasibility study conducted by the Science and Education Administration of USDA in 1977, and the statement of Texas Tech University submitted for the record before this committee on March 26, 1979. We will not repeat this information, as we believe the record is replete with scientific and economic documentation which describes the conditions of the region and the research required to seek viable solutions to a complex set of critical problems confronting agriculture and natural resource conservation throughout the Great Plains, the semi-arid southwest and arid and semi-arid lands throughout the world. Water availability and quality continue to be limiting factors affecting the growth and cultivation of existing crop species. This underscores the urgent need for new varieties of drought resistant food and fiber crops for areas where nonrechargeable groundwater reserves are declining, energy costs are increasing, and natural precipitation--even though limited--could be used more efficiently.

The national thrust to seek out all viable strategies for conserving energy and water in agriculture has amplified the urgency to seek more energy- and water-efficient strains of plant materials and improved soil and water management practices. The need for a comprehensive, multidisciplinary, long-term basic science research program is obvious. Texas Tech University has taken the lead to work to develop a cooperative program with the U. S. Department of Agriculture-Agricultural Research Service, the Texas Agricultural Experiment Station, agricultural colleges and universities throughout the region, agricultural producers, the agribusiness industry and private research organizations.

## BACKGROUND

The key planning events involving Texas Tech University which have taken place in conjunction with the development of the research program and laboratory to date are as follows:

1975-1976 Preliminary discussions with officials of the U. S. Department of Agriculture and members of the Congress.

1977-1978 Congress appropriated $100,000 for a feasibility study. The study team concluded that there was indeed an urgent need for a plant stress and water conservation research program and that Lubbock, Texas, was the ideal location for a laboratory facility. A later decision to locate the facility on the campus of Texas Tech University, in conjunction with the College of Agricultural Sciences, finalized the first major step in the development of the program.

1978-1979 Congress appropriated $800,000 for the preparation of a research program plan and architectural and engineering plans for the appropriate laboratory in which to carry out the proposed research. These plans have now been completed for Phase I. The structure will contain about 67,000 square feet of research space and will cost approximately $24,000,000 for construction. The facility contains space for twenty-two scientists, with accompanying greenhouses, headhouses, growth chambers and storage units.

The Science and Education Administration in August, 1979, transferred a USDA scientist (plant physiologist) to Lubbock, Texas, to serve as a cooperative scientist working with Texas Tech and Texas Agricultural Experiment Station scientists on environmental stress mechanisms in sorghum and cotton. Currently, Texas Tech is providing office and laboratory space for five USDA-ARS scientists who, together with Texas Tech scientists, are actively working in the research program. In addition, the University provides use of the library, computer and other University facilities as well as extending full faculty privileges to the USDA-ARS scientists.

1983-1984 Congress appropriated $500,000 for preparation of the architectural and engineering plans for Phase II of the laboratory, for review and finalization of all plans, and for development of final construction estimates. These plans are near completion.

1984-1985 Congress appropriated an additional $150,000 for support of the ongoing cooperative research program, bringing the total annual funding for the research program to $900,000 ($525,000 in Base Funds and $375,000 in Formal Budget Funds).

1985-1986 Congress appropriated an additional $250,000 for support of the ongoing cooperative research program, bringing the total annual funding for the research program to $1,150,000 ($525,000 in Base Funds and $625,000 in Formal Budget Funds).

Funding of the Cooperative Plant Stress and Water Conservation Research Program

| | Base Funds | Formal Budget Funds | Congressional Add-on Funds | Total Funds |
|---|---|---|---|---|
| 1980 | $ -0- | $ -0- | $ 200,000 | $ 200,000 |
| 1981 | 200,000 | 100,000 | 100,000 | 400,000 |
| 1982 | 400,000 | 50,000 | -0- | 450,000 |
| 1983 | 525,000 | 225,000 | -0- | 750,000 |
| 1984 | 525,000 | 225,000 | -0- | 750,000 |
| 1985 | 525,000 | 225,000 | 150,000 | 900,000 |
| 1986 | 525,000 | 375,000 | 250,000 | 1,150,000 |
| REQUEST-1987 | 525,000 | 625,000 | 1,000,000 | 2,150,000 |

## RESEARCH ACTIVITY TO DATE

Through fiscal year 1986, Congress has appropriated a total of $4,250,000 for cooperative research in plant stress and water conservation. Scientists from USDA-ARS, Texas Tech University, and the Texas Agricultural Experiment Station have initiated studies within the framework of the research program plan developed to guide the orderly, systematic and effective search for the information needed to solve the problems identified in this statement. The research team is making progress in better understanding the relative importance of various developmental and physiological responses of plants to soil water deficits and to atmospheric drought. A substantial amount of research has been initiated in the genetic improvement of grain sorghum and cotton. These crops can be grown in areas of limited rainfall. Research currently underway includes:

Soil-Root-Water Area: Research projects are designed to define the effect of the soil environment on rooting patterns (depth and root density) of sorghum and cotton as related to soil water extraction and water use efficiency. Soil environment is defined as a function of soil type, soil nutrient status and soil water status. These experiments should provide a definition of the ideal root system necessary to exploit the maximum soil volume with the least expense to the plant in terms of non-harvestable dry matter.

Soil-Plant-Atmosphere Area: Research projects are designed to delineate the major factors involved in determining photosynthesis: transpiration ratios of both sorghum and cotton. The role of the physical environment (evaporative demand and soil water supply) and the plant response (stomatal conductance to water and the photosynthetic rate) will be defined. The research is designed to identify the minimum level of leaf conductance necessary to support maximum photosynthetic activity in each specie under a wide range of soil water conditions.

Physiological Area: Experiments are designed to evaluate the utility of certain drought tolerance mechanisms. Of prime concern is osmotic adjustment resulting in turgor maintenance. The effect of increase osmotica on cellular metabolism is unknown, and will be defined with respect to chloroplast function. The major site of stress effects also will be defined as a function of source activity or sink activity. Important sinks include new leaf development, root development and fruit development. At present we do not know whether environmental stress affects the source directly or if the observed response is due to an indirect effect resulting from reduced sink activity. Prior to exploration of genetic variability and genetic manipulation it is essential to define the site of direct stress effects.

Results from the initial studies are extremely encouraging. This work has been conducted using existing Texas Tech University and Texas Agricultural Experiment Station space and facilities. This represents a substantial effort and demonstrates an extremely efficient use of the federal and state funds expended. Essentially every state in the Great Plains has devoted some scientific effort toward developing technology to conserve our water resources and utilize that water which is available more efficiently in crop production. However, due to the disaggregation of scientists, large environmental differences between research locations, and the diversity of plant responses elicited by water stress, there appear to be no major breakthroughs on the horizon. A unified research effort toward understanding and resolving the problem is necessary. To accomplish this effort, it will require additional funding, scientists and a highly specialized research facility.

With additional funds appropriated by the Congress, the cooperative research program developed by the U. S. Department of Agriculture-Agricultural Research Service, the College of Agricultural Sciences at Texas Tech University, and the Texas Agricultural Experiment Station will be fully developed.

## MAJOR BENEFITS OF THE RESEARCH PROGRAM

1. Substantial reduction in the water and energy requirements for the production of quality food and fiber crops throughout the semi-arid southwest.

2. Development of germplasm of major grain and fiber crops which possesses superior resistance to adverse environmental conditions and yet maintains an inherent high yield potential.

3. Development of the basic principles essential for the design of soil and crop management systems to conserve and make available during the growing season greater amounts of precipitation and to enhance the production of more stress-tolerant plants.

4. Maintenance of a high level of agricultural production throughout the Southern Great Plains, thereby preventing (a) the collapse of an important, highly-developed agricultural region and (b) the attendant economic, social and environmental problems which would ensue.

5. A substantial contribution to the national effort to enhance the productivity of American agriculture, thereby increasing the availability of feed grain and natural fiber commodities for sale to foreign markets.

As water efficiency of the key commodity plants is increased through the research program, less irrigation water per unit of crop yield will be required. Each inch of natural precipitation captured and stored in the soil will be used more efficiently. By substantially reducing the need for irrigation water, fuel and labor costs associated with irrigation will be decreased. If the plants perform under dryland conditions at a higher level of efficiency, the farmer's net earnings, assuming reasonable commodity prices, should be favorable. It is projected that the research encompassed by this program would result in a minimum 15% increase in water use efficiency.

### THE PROPOSED LABORATORY

The feasibility study conducted by USDA recommended that a major research effort consisting of a central laboratory and support facilities be located on the campus of Texas Tech University. Three primary research thrusts have been outlined for the Plant Stress and Water Conservation Research Laboratory with specific objectives defined for each thrust. These are as follows:

Thrust 1 Characterize the dynamics of the soil-plant-atmosphere continuum.

Thrust 2 Define environmental stress impact on growth, development and yield, and mechanisms which aid plants in tolerating or avoiding environmental stress.

Thrust 3 Define genetic control of stress mechanisms.

### CONCLUSION

The research program and proposed laboratory will require a number of disciplinary teams in areas such as soil physics, soil chemistry, soil classification, plant physiology, plant breeding, agricultural engineering, and other allied areas requiring individual scientist input. This level of activity will allow effective and efficient research activity to focus on critical questions relating to problems of plant stress and water conservation. Because of the complexity of the proposed research, and the resources needed to solve these pressing problems, this program will be of long-term nature. The program is being recognized as a national Center of Excellence for basic plant stress and water conservation research in agriculture. With the development of the program, the University is in a position to invite private industry scientists and research support to join the activity. A technical relationship has been established with the USDA-ARS Plant Gene Expression Center in California.

Congress, in fiscal year 1977, appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March, 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for Phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. These plans are near completion. Near final architectural plans and specifications for the proposed laboratory have been delivered to the USDA-ARS. In fiscal years 1980, 1981, 1982, 1983, 1984, 1985, and 1986, Congress appropriated $200,000, $400,000, $450,000, $750,000, $750,000, $900,000, and $1,150,000, respectively, for cooperative research in plant stress and water conservation.

It is proposed that Congress continue to recognize the urgency of the research program by appropriating funds at the level of $1,000,000 over the current budget allocation of $1,150,000 ($525,000 Base Funds plus $625,000 Formal Budget Funds) for this project to continue and strengthen the cooperative plant stress and water conservation research program. This will bring the total research funding for FY 1987 to $2,150,000. It is further requested that the Congress appropriate $24,000,000 for the construction of the Plant Stress and Water Conservation Laboratory in fiscal year 1987 on the land provided by Texas Tech University.

Thank you Mr. Chairman, for your consideration of this proposal.

## NATIONAL PORK PRODUCERS COUNCIL

### STATEMENT OF DAVID CUMMINGS

### ACCOMPANIED BY DOYLE TALKINGTON, ADMINISTRATOR

Senator COCHRAN. Our next witnesses are Mr. David Cummings and Mr. Doyle Talkington, representing the National Pork Producers. It is good to see you, David. Doyle, I'm glad you are here.

Mr. CUMMINGS. Thank you, Mr. Chairman. We appreciate the opportunity to be here.

I am a pork producer from Yazoo City, MS. I have with me Doyle Talkington, who is administrator of the National Pork Producers Council Office here in Washington.

The National Pork Producers Council represents 110,000 pork producers and their families in 38 member States which are affiliated with the national organization. The National Pork Producers Council represents virtually all of the commercial pork production in the United States.

The 1987 budget under consideration today is of great importance to our organization and its members. We are concerned about the allocations for agricultural research, teaching, extension, and protection. These areas all have an impact on the profitability of our members.

### ARS BUDGET

First, let us look at the Agricultural Research Service budget. The research expenditures for the improvement of animal agriculture are not proportional. We are concerned that the funds for animal agriculture research have steadily fallen behind the funds that are available for other forms of research funded by the Department. The livestock farmer produces approximately 50 percent of the research dollars. Consumers are the ultimate beneficiaries of agricultural research through lower prices paid for efficiently produced products.

Animal agriculture shows a very high rate of return on investment in research, with swine research heading the list of high rates of return. It is very difficult for our producers to understand why there is such a disparity in the funds made available for animal and plant agriculture.

### CSRS BUDGET

Looking at the Cooperative State Research Service budget, we are again disappointed to see that the administration did not propose any funds for animal health research under section 1433. We recommend that Congress provide funds for section 1433 research at the $6 million level.

We also believe that $6 million for animal health research in the special grants program should be given positive consideration.

We are pleased to see that the $4.5 million is again included in the administration's budget for competitive research grants in animal science. The National Pork Producers Council also supports an increase in competitive research grants for biotechnology.

### EXTENSION SERVICE BUDGET

The proposed budget cut for the Federal Extension Service is far too deep and far-reaching to be acceptable to pork producers. The Extension Service has a long, impressive record of being instrumental in new technology transfer from research to the family level.

In this time of economic stress on pork producers and all farmers, the need for efficiency is more important than ever. The Extension Service not only is instrumental in helping farmers become more efficient to enhance the possibility for profit, but it has recently responded with financial and stress counseling to troubled farmers.

The proposed reduction would cut the Extension Service work force in half nationwide and would affect direct farm services as well as 4–H and other programs not directly related to agriculture but critical to our efforts.

It is important to pork producers that the Extension Service be funded so that programs such as the residue avoidance initiative and integrated reproduction management can continue.

### APHIS BUDGET

Further, we are asking that the line item for pseudorabies be restored in the APHIS budget for animal health programs and that $1.5 million be budgeted for the PRV programs.

USDA and APHIS have been very cooperative over the past 3 years in the initiation and administration of the pseudorabies pilot projects. The use of pilot projects to evaluate PRV control and eradication procedures is essential for establishment of an industry position on PRV. The pilot projects have been successful to date in answering many questions about PRV, but unanswered questions remain and must be solved for the program to be successful.

Research establishing guidelines for large herds and continuation of the Federal/State cooperative efforts in the pilot project areas would have great benefits at very little additional costs.

The National Pork Producers Council is closely involved with and impacted by the programs being discussed here today. We appreciate your consideration of our views as we strive to continue to provide the American consumer with a safe, wholesome diet, balanced with nutritious pork.

Thank you, Mr. Chairman. If you have any questions, we would be happy to try to answer them.

Senator COCHRAN. Thank you. I appreciate your testimony. I am also concerned about the fact that we did not see any request on the part of the administration for funding of the Special Grants Program generally. It wasn't that any particular area was singled out, such as livestock or pork research, but the entire area of special grant research projects was zeroed out in the President's budget.

When we had the administration officials before the committee and had a chance to talk to them about it, I made the observation at that time that what it looked like to me was that for the Agriculture Research Service, which comes within the Department—and the research is done by Department scientists—funds were requested, but research that is done in areas selected by the Congress was not funded at all.

So I got the picture, and I think that is what we are seeing, that if the administration can decide who does the research and where it is done and the subject matter that is being explored, then they are for funding it, and they are going to make us put in the funding on our own for the research that the Congress thinks has a higher priority.

We are seeing, I think, reflected in that problem something that is not really new in government: If you can decide where the money is going to be spent, you will be more for it than you would otherwise.

We are going to work with the administration and with the other members of the committee to try to make sure that important research activity is not forgotten. These are some very important concerns and they affect not only the economic well-being of producers but the access of consumers to reasonably priced products, and that is important. That is an important consideration in all of this, and we will be trying to sort through it and make the right decisions. I think your testimony is very helpful to us.

I don't know that I have any questions. We appreciate your being here. Thank you.

[The statement of Mr. Cummings follows:]

## STATEMENT OF DAVID CUMMINGS

We thank you for the opportunity to appear before your subcommittee. Representatives of the National Pork Producers Council have been afforded this opportunity for many years and are always courteously received, which we do appreciate.

The National Pork Producers Council represents 110,000 pork producers and their families in 38 states which are affiliated with the national organization. The NPPC represents virtually all of the commercial pork production in the United States.

The budget under consideration here today is of great importance to our organization and its members. We are very concerned about the allocations for agricultural research, teaching, extension, and protection. These areas all have a great impact on the profitability of our members. In fact, as demonstration of this concern, NPPC cooperates directly and indirectly with the various government agencies in each of these areas.

The NPPC feels strongly that a high level of research is needed just to maintain our position in productivity, efficiency, disease control and prevention, food safety, product research, and human nutrition. An additional increment of funding helps the industry to make strides forward.

As for extending the knowledge gained, NPPC works very closely with the federal and state Extension Services. We provide many materials and forums to gather the information for subsequent extension to our membership. This activity is fundamental to progress. The information must not only be developed, but it must be transmitted to the users for adoption.

The NPPC has also been interested in the disease surveillance and health protection activities of the USDA. In accord with our feelings, we provided financial cooperation to the federal government to promote the initiation of pseudorabies pilot projects. Many other areas of interest saw expanded NPPC and federal agency discussion and cooperation as well.

The nation's pork producers, as represented by the National Pork Producers Council, are cognizant of the tremendous budget deficit that the government faces. We are concerned about the effect of this deficit on the nation's economy and support emphasis to reduce the deficit. Although the deficit and the appropriations for the entitlement programs in the Department of Defense makes the amounts that we are discussing seem insignificant, we are aware that increases must be compensated for by decreases in all the budgets if our efforts to reduce the budgetary deficits are to succeed.

### Agricultural Research Service (ARS)

The research expenditures for the improvement of animal agriculture are not proportional. We are concerned that the funds for animal agriculture research have steadily fallen behind the funds that are available for other forms of research funded by the department. The livestock farmer produces approximately 50 percent of the total agricultural income; but unfortunately, animal agriculture never receives anywhere near 50 percent of the research dollars.

Consumers are the ultimate beneficiaries of agricultural research through lower prices paid for efficiently produced products. Animal agriculture shows a very high rate of return on investment in research, indicating that past expenditures were comparatively lacking. Swine research heads the list of high rates of return. It is therefore difficult for our producers to understand why there is such a disparity in the funds made available for animal and plant agriculture.

We are also convinced that for the animal or total agricultural research efforts to be successful in future years, that there does have to be additional funds for training young scientists. We recommend, therefore, that graduate fellowships for fiscal year 1987 be increased to $5 million rather than dropped, as proposed in the present budget.

Cooperative States Research Service (CSRS)

The Agricultural Experiment Station system with research programs distributed in all 50 states and U.S. territories, coordinated by CSRS and combined agricultural interests, brings together State and industrial resources with Federal funds to form the ideal partnership to provide answers to America's agricultural problems. Proper use of the knowledge generated by agricultural research through education and extension will assure the best application of it.

We are disappointed to see that the administration budget did not propose any funds for animal health research under Section 1433. We recommend, therefore, that Congress provide funds for the Section 1433 research at the $6 million level.

Animal diseases, pests and other health hazards often result in major losses which must be absorbed by the individual producer; however, the overall anticipated loss levels of the industry -- now over $14 billion a year -- are passed on to consumers. In the Nation's long-term outlook these losses have critical importance in terms of maintaining low cost animal products for consumers, in conserving energy resources required in animal production, and in meeting expending national and international requirements for high quality protein. Intensified and expanded research is needed to find solutions to the most serious animal health problems that limit the efficient production of animal food products. Recent technological advances in the biological and medical sciences that would be applied to veterinary medical problems under this problam offer promise of major breakthroughs in the diagnosis, prevention and control of food animal health hazards.

We also believe that $6 million for animal health research in the special grants program should be restored. We are pleased to see that nearly $4.5 million is again included in the administration budget for competitive research grants in animal science. We also support the budgeting of nearly $20 million for competitive research grants for biotechnology. We have stressed, in several statements, that there is a dire need for good research in animal production. The research bank has almost been exhausted, and we are now in need of real breakthroughs to allow animal production to maintain its competitive position in the total agricultural industry. We believe there are exciting possibilities which can stem from biotechnology research. We are certain many will agree to a major increase in the competitive-grants research for biotechnology.

We are convinced that these increases in competitive research grants will increase the training of young scientists who are necessary for agricultural research to maintain its position in the scientific world. This basic research, which will be conducted under the competitive research grants program, is a fertile training field for young scientists who must fill the ranks of those senior scientists who are constantly being lost to attrition.

Federal Extension Service (FES)

The proposed budget cuts for Extension are far too deep and far reaching to be acceptable to pork producers. The Extension Service has a long impressive record of being instrumental in new technology transfer from research to the farming level.

In this time of economic stress on pork producers and all farmers, the need for efficiency is more important than ever. The Extension Service not only is instrumental in helping farmers become more efficient to enhance possibility for profit, but has recently responded well with financial and stress counseling to troubled farmers.

The proposed cuts would cut the Extension Services work force in half nationwide, and would affect direct farm services as well as 4-H and other programs not directly related to agriculture, but critical to their efforts.

It is very critical to pork producers that the Extension Service be funded so that programs such as the Residue Avoidance Program and Integrated Reproduction Management can continue.

The administration's intentions, that the proposed cuts in extension be predominantly in non-agricultural areas, may not be adhered to on the state level. This could compound some serious problems in agriculture in some states.

### Animal and Plant Health Inspection Service (APHIS)

We are asking that the line item for pseudorabies be restored in the APHIS budget for Animal Health Programs and that $1.5 million be budgeted for PRV Programs.

USDA/APHIS has been very cooperative over the last three years in the initiation and administration of the Pseudorabies (PRV) pilot projects. The use of pilot projects to evaluate PRV control and eradication procedures is essential for establishment of an industry position on PRV.

The pilot projects have been successful in answering many questions about PRV, but unanswered questions remain.

Research establishing guidelines for large herds and continuation of the federal/state cooperative efforts in the pilot project areas would have several benefits.

In addition to gaining additional information needed for long-range planning, the progress that has been made toward control and eradication in the pilot project areas would be preserved and expanded upon, giving a good start to any industry efforts in the future. If these cooperative efforts are stopped completely, as proposed by the administration's budget, the resulting breakdown in PRV control efforts could allow these areas to become re-infected. This could hinder future efforts.

### Conclusion

The National Pork Producers Council is very closely involved with, and very much impacted by, the programs being discussed here today. We appreciate your consideration of our views as we strive to continue to provide the American consumer with a safe, wholesome diet, balanced with nutritious pork.

## TEXAS COTTON GINNERS' ASSOCIATION

### STATEMENT OF J.H. TONY PRICE

Senator COCHRAN. Our next witness is Mr. J.H. Tony Price, representing the Texas Cotton Ginners' Association.

Mr. PRICE. Thank you, Mr. Chairman. I appreciate the opportunity to speak to you.

I will be addressing the research funding of cotton ginning laboratories operated by the Department of Agriculture's Agricultural Research Service at Mesilla Park, NM, and Lubbock, TX. My association membership is comprised of gin businesses in Texas and New Mexico.

Cotton ginning, as you are well aware, being from Mississippi, holds a unique position in the sequence of events that brings cotton from the farmers' fields to the marketplace. No farm policy, act of Congress, or magic wand can make the cotton marketable until it has been ginned.

If the ginning industry cannot advance its technology through research, then many farmers can expect to lose in quality discounts and higher processing costs, and those losses will offset the benefits expected under the recently enacted farm legislation.

In the Mesilla Park laboratory, the primary interest is in the California, Arizona, New Mexico, and El Paso Valley production area, and the Lubbock laboratory conducts research primarily for the areas of Texas and Oklahoma that harvest the crop with the mechanical strippers. That accounts for roughly one-fourth of the cotton grown in the United States.

While private industry has been spending $3 to $4 million a year in basic research for ginning, the three USDA laboratories, including the one at Stoneville, have been funded for around $2 million. It is increasingly difficult for the private sector to devote additional dollars to basic research in view of the extremely depressed cotton market. However, it is paramount to the cotton farmers' interest that gins be able to preserve maximum fiber quality at the lowest possible cost.

## COSTS OF COTTON PRODUCTION AND PROCESSING

The cost of ginning currently is a major item in the farmer's expense for getting his cotton to market. In the stripper harvest areas like west Texas and Oklahoma and parts of New Mexico, per bale ginning charges average around $50 a bale to $52 a bale.

In Texas, agricultural economists estimate it costs $204 to grow a bale of dryland cotton. That's in west Texas. So roughly about 25 percent of the farmers' cost is in the ginning. The same holds true for the Oklahoma production area.

Our industry believes the keys to maintaining a balance between production cost and processing cost is to improve the efficiency of gins and to preserve maximum quality of fiber that will produce these two benefits for the farmer. One, it will increase efficiencies at the gin, and in that way let the gins maintain their present charges without escalating additional costs. The second is the preservation of quality that will allow the farmer to realize maximum revenues for his cotton.

The USDA agencies at Mesilla Park and Lubbock must upgrade their operations to fulfill these efficiency and quality goals. In some areas, research investigations must be expanded.

The present level of funding for these two installations is not adequate to permit the work that the industry believes is necessary. The economic justification for adequate funding can be found in several current projects. At Mesilla Park, our industry knows that the investigations in moisture conditioning and drying seed cotton will add several dollars per bale to the farmer's income.

At Lubbock, the projects to remove foreign matter from cotton can add $15 to $20 per bale to about 30 percent of the cotton grown in most of Texas and Oklahoma. These are only two examples of the economic benefits we expect from the work at these installations. We are talking about millions of dollars of benefits per hundreds of thousands of dollars of research investment.

Although we are not fully aware of individual project needs, our industry believes that each laboratory, Mesilla Park and Lubbock, will each require $500,000 in additional funds in the next 2 years just to respond to the quality and efficiency needs of cotton farmers. These funds, we believe, will be the minimum that will upgrade the facilities and allow the addition of two or three professional staff to carry on the work.

These amounts also at these two installations will bring the Mesilla Park and the Lubbock lab funding in line with that at Stoneville.

We also want to emphasize that cotton farmers will not receive full benefits from farm legislation without a viable research program in the ginning industry. We consider funding of the USDA ginning laboratories a protection of the investment the Federal Government is making in this new farm program.

Thank you, Mr. Chairman.

### GOVERNMENT VERSUS PRIVATE FUNDING FOR GINNING RESEARCH

Senator COCHRAN. Thanks very much, Mr. Price.

Let me ask you to help me out. Sometimes when we are arguing for appropriations for activities like this, we are confronted by critics who say the industry ought to pay for that because that just benefits the industry, and why should the taxpayers pay for research that is designed to simply improve the technology that benefits one industry.

How do I combat that argument?

Mr. PRICE. We quite frequently hear this, and that is the reason I mentioned that private industry currently is spending about $2 to $3 million a year on applied-type research. When you start thinking that the cotton farmer has to have this technology in order to make his cotton marketable, then you get into the business of how can you get private industry into the basic-type research that ARS does.

It is very difficult to justify when you say the market is not there. In other words, there are, I think, 1,800 cotton gins in the United States now, and when you start asking someone to do R&D to produce a machine or a technology or a system that has that few customers, it is very difficult for them to justify.

But basically, ever since Stoneville was established, they have developed the basic research concept, and then private industry has picked up and taken the money and spent considerable amounts to adapt that research into applied technology.

Senator COCHRAN. I think that is a very good answer, and I appreciate your taking time to be here and helping us in this way with your testimony today.

Mr. PRICE. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you a lot.

[The statement Mr. Price follows:]

## STATEMENT OF TONY PRICE

My name is Tony Price and I serve as executive officer of the Texas Cotton Ginners' Association headquartered in Dallas, Texas. Our membership is comprised of gin businesses in Texas and New Mexico and I will address the research funding of cotton ginning laboratories operated by the Department of Agriculture's Agricultural Research Service at Mesilla Park, New Mexico and Lubbock, Texas.

Cotton ginning holds a unique position in the sequence of events that bring cotton from the farmers' fields to the market place. No farm policy, Act of Congress or magic wand can make cotton marketable until it has been ginned. This is the processing step between the harvest of the crop and the selling of the bales that go through warehouses into the textile mills.

If the crop is large, gins normally prosper. If the crop is small, gins are the first to feel the effects of lost volume that leaves marginal operating revenues. There is no program in the current farm bill that offers any direct protection or benefit to the gins. Indirectly, I expect gins to benefit as the provisions of the current Act permit farmers to regain their markets and restore a healthy cotton economy.

In order to offer maximum efficiencies and economies to the cotton producers, gins must maintain processing capabilities and improve systems that retain fiber qualities. If the ginning industry cannot advance its technology through research, then many farmers can expect to lose in quality discounts and higher processing costs; and those losses will offset the benefits expected under the recently enacted farm legislation.

Much of the research we will need to maintain fiber quality and reduce the farmers' processing costs is carried out in the USDA ginning research laboratories at Mesilla Park, New Mexico; Lubbock, Texas; and Stoneville, Mississippi. The areas served by the New Mexico and Texas installations will produce over half the cotton crop in the United States this year.

The Mesilla Park laboratory primary interest is in the California, Arizona, New Mexico and El Paso Valley production area; and the Lubbock laboratory conducts research primarily for the areas of Texas and Oklahoma that harvest the crop with mechanical strippers -- roughly a fourth of the cotton grown in the United States.

While private industry has been spending three to four million dollars a year in basic research for ginning, the three USDA laboratories have been funded slightly above two million dollars. It is increasingly difficult for the private sector to devote additional dollars to basic research in view of the extremely depressed cotton gin market. With farmers in trouble, gins continue to go out of business because of increased operating costs and loss of volume from farmers going out of business.

However, it is paramount to the cotton farmers' interest that gins be able to preserve maximum fiber quality at the lowest possible cost. The cost of ginning currently is a major item in the farmers' expenses for getting his cotton to market. In stripper harvest areas like West Texas and Oklahoma, and parts of New Mexico, per bale ginning charges averaged $52.48 in West Texas, 51.85 in New Mexico, and 50.15 in Oklahoma in the 1984-85 season according to USDA ERS staff report on "Cotton Ginning Charges."

In Texas, Agricultural Extension economists estimate it costs $204.40 to grow a bale of dry land cotton in West Texas; so roughly 25% of the farmer's cost is in the ginning. The same holds true for the Oklahoma production area. The percentage is about the same for irrigated cotton in that area.

Our industry believes one key to maintaining a balance between production costs and processing costs is to improve the efficiency of gins and to preserve maximum quality of fiber that will produce two benefits for the farmer:

(1) Increased efficiencies will permit gins to maintain present charges without the steadily escalation of costs;

(2) Preservation of quality will allow the farmer to realize maximum revenues for his cotton.

Our Association maintains a close relationship with the research facilities, both private and those operated by USDA. The USDA agencies at Mesilla Park and Lubbock must upgrade their operations to fulfill these efficiency and quality goals. In some areas, research investigations must be expanded. The present level of funding for these two installations is not adequate to permit the work we believe is necessary.

The economic justification for adequate funding can be found in several current projects: At Mesilla Park, our industry knows that the investigations in moisture conditioning and drying seedcotton will add several dollars per bale to the farmers' income. At Lubbock, the projects to remove foreign matter from cotton can add $15 to $20 to the value of about 30% of the cotton grown in most of Texas and all of Oklahoma. These are only two examples of the economic benefits we expect from the work at these installations. We are talking about millions of dollars of benefits for hundreds of thousands of dollars of research investment.

Although we are not fully aware of individual project needs, our industry believes that each laboratory -- Mesilla Park and Lubbock -- will each require $500,000 additional funds in the next two years just to respond to the quality and efficiency needs of cotton farmers. These funds, we believe, will be the minimum that will upgrade facilities and allow the addition of two or three professional staff to carry on the work. We really are not talking about much expansion -- just the bare bones to achieve these very critical goals.

We realize that it is difficult to justify increased funding in this era of deficit-reduction. We also know, first hand, that funding at these two installations has declined in recent years to the point that research capabilities appear to be threatened. We also want to emphasize: cotton farmers will not receive full benefits from farm legislaton without a viable research program in the ginning industry. We consider funding of the USDA ginning laboratories a protection of the investment the federal government is making in the new farm program. Thank you.

## National Dairy Herd Improvement Association

### STATEMENT OF DONALD LONG, PRESIDENT

Senator Cochran. Our next witness is Mr. Donald Long, who is president of the National Dairy Herd Improvement Association.

Mr. Long. Thank you, Mr. Chairman.

I want to thank you and the subcommittee for this opportunity to be with you.

I am Donald Long, a dairy farmer from Wisconsin, and I farm in partnership with my brother, his wife, myself and my wife, and our families. I am president of the National Dairy Herd Improvement Association, which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program.

The National Dairy Herd Improvement Association believes it is in the best interest of dairy farmers, taxpayers, and government to continue support for the Extension Service, dairy product research, and dairy production efficiency research. The National DHIA, the dairy industry, and the Forum for Animal Agriculture encourage product research and distribution research as the highest priority dairy research.

The events of the past year continue to demonstrate the dairy industry needs and to expand its markets by developing new products and improving its efficiency in distributing products. On the other hand, production efficiency should not be permitted to stagnate by abandoning production efficiency research. Eventually, the dairy farmers in the United States need to become so efficient that they can compete in the world market.

The county agricultural and farm management agents throughout the United States are invaluable resource persons for those of us who are farmers. We can get answers on insecticides or yield expectations or a particular corn variety or the newest regulation just by dialing our telephone as a local call.

#### IMPORTANCE OF THE EXTENSION SERVICE

This Government agency is of utmost importance to us as a method of learning new techniques in soil and water and resource management. Our county agent coordinates informational meetings with new research data and new Government regulations in crop and cattle production. This is one of the tools we have to make a net profit in dairy farming. We are able to utilize our resources more effectively.

As a dairy farmer, I have contact with my ag agent almost every week. It would be tougher for us to come out of a hole if research is curtailed at this time. My wife works with the county home economics agent, and my children have worked with the 4–H and youth agent.

My family and neighbors would miss the county Extension personnel as advisers and resource personnel. They are a direct link between yourselves, the lawmakers, and ourselves—the American farmers. We do need to gear up for a new generation of technological farming. We have to have the research and equipment in order for Extension to be effective as information providers of the future.

Most dairy farmers will have on-farm computers by the year 2000, which is less than 15 years away. We believe reductions in the Extension Service budget for fiscal 1987 were unnecessarily severe and have come at a time when farmers can ill afford to lose the assistance of Extension. But again, we do encourage the Extension Service and the Extension system to organize their needs for the 21st century by setting reasonable priorities in adopting electronic information technology and focusing on whole farm education and redirecting limited resources and limiting its activities to the base of support in agriculture.

We ask your consideration of the following efforts which contribute to the efficiency of the dairy industry: The funding of dairy product research and processing/distribution efficiency; policies which encourage expansion of dairy product markets, including higher minimum standards in component pricing; continued support for research which leads to improved production efficiencies, including research efforts in mastitis control, reproduction problems, and genetic improvement; and for the reinstatement of the Extension Service budget to reasonable levels.

I thank you for your reconsideration of Extension and research budgets, Mr. Chairman.

### DAIRY EFFICIENCY IMPROVEMENT

Senator COCHRAN. Thank you very much, Mr. Long, for your testimony. It is very impressive. You have done a lot of work in preparing this testimony, and I think it will be very helpful to our committee.

Let me ask you this. We hear a lot about progress being made in various areas of dairy research—the bovine implant is one of the most startling innovations that we hear about in terms of the efficiencies which that may bring to dairy production. And there are other very important steps being taken.

One was highlighted by the Agricultural Research Service during their testimony. Persons who are allergic, for one reason or another, to dairy products that are consumed in the usual way can take a tablet now and use that as a substitute for dairy products.

Are we researching ourselves out of the dairy business? I mean, are we becoming so efficient that we are producing more and more and more surplus which we cannot get rid of and the Government is having to buy? Somebody asked me that. Why do we keep on improving efficiencies of dairy herds when we cannot consume everything we produce now? We are having to pay dairy farmers now to liquidate their herds.

Mr. LONG. We have done that, but I think the things that we have not done is had the product research and the distribution research that we need to go along with it. This is where we have fallen short. So I think that we definitely need to put forth an effort in that area.

Senator COCHRAN. I have an idea, too, that we need to do more research in marketability of products and the product that is more attractive to the consumer. We are seeing a decline in demand at the same time we are seeing an increase in production, and that is part of the problem, in my judgment.

I know we have seen the development of products with longer shelf life than they ever thought possible before, in containers that are attractive and in flavored milk products. I think that will help. I hope it does.

Mr. LONG. I think that is what our opportunity is, to make changes in the future and move ahead and not continue to have the traditional values that we have had in products in the past.

Mr. LONG. Senator Bumpers?

Senator BUMPERS. Mr. Chairman, first I would like unanimous consent that I be permitted to submit some questions for the record.

Senator COCHRAN. Without objection, so ordered.

### DEMAND FOR DAIRY PRODUCTS

Senator BUMPERS. Second, I would like to ask Mr. Long, What is the decrease in dairy product demands in this country right now, as compared to, say, 2 or 3 years ago? Senator Cochran just mentioned that there is a decrease in demand and an increase in productivity.

Mr. LONG. Well, through the efforts of marketing, not only within our State of Wisconsin but on a national basis, I believe we have seen consumption of dairy products rise in the last period of time, which proves the point that even though we produce a product that is very, very good for most individuals, we traditionally have not marketed it.

I think that this is a whole area that we, as dairy farmers, have become involved in, and it is an important area where we realize that we not only have to produce a product, but we also have to market the product.

Senator BUMPERS. Your organization is mostly designed for improving productivity and the health of the cows and that sort of thing, and it is not really into production and marketing.

Mr. LONG. No; but we——

Senator BUMPERS. Did you personally favor the whole herd buyout program?

Mr. LONG. Did I personally favor it? I did not submit a bid. I feel——

Senator BUMPERS. I would have, if I had known they were going to pay $22.

Mr. LONG. I feel that—well, I am looking to be in the dairy industry and not to be out of it, and that is my reason for not submitting a bid and to work within the dairy industry in doing some things, rather than to take part in that.

I do think that the short-range effect on the dairy termination program will be beneficial, but I am afraid that unless we go into something such as production quotas, that we are going to find ourselves in the same situation within 18 months, as far as producing—as you said, and we know as dairymen—more than what the consumption is.

A part of that problem is that we have fixed costs in our dairy industry, and we are fully employed. There is no way that we can go out and find another job to partially supplement our income. The only way we can get more income is to put in more cows as the costs go up. That is why you are seeing more surplus, because as our margins get cut, the only way we can get more income is to milk more cows.

Senator BUMPERS. Thank you very much, Senator.

Thank you, Mr. Long, for the excellent testimony and assistance you have provided for the committee.

Senator COCHRAN. Thank you.

Mr. LONG. I want to thank you for this opportunity.

[The statement of Mr. Long follows:]

## STATEMENT OF DONALD LONG

### SUMMARY

I am Donald Long, President of National Dairy Herd Improvement Association, Inc., which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program.

National Dairy Herd Improvement Association believes it is in the best interest of dairy farmers, taxpayers, and government to continue support for the Extension Service, dairy product research, and dairy production efficiency research. National DHIA, the dairy industry, and the Forum for Animal Agriculture encourage "product research and distribution research" as the highest priority dairy research. The events of the past year continue to demonstrate the dairy industry needs to expand its markets by developing new products, improving its efficiency in distributing products, and abandoning the obsolete marketing practices which encourage the production of water and butterfat.

On the other hand, production efficiency should not be permitted to stagnate by abandoning production efficiency research. Eventually, dairy farmers in the United States need to become so efficient they can compete in the **world** market.

We believe reductions in Extension Service budgets for fiscal 1987 were unnecessarily severe and come at a time when farmers can ill-afford to lose the assistance of Extension. However, we also encourage the Extension Service and extension system to organize for the needs of the 21st century by setting reasonable priorities, adopting national electronic information technology, focusing on "whole-farm" education, redirecting limited resources and limiting its activities to its base of support in agriculture.

We ask your consideration of the following efforts which contribute to the efficiency of the dairy industry:

(a) Funding for dairy product research and processing/distribution efficiency;

(b) Policies which encourage expansion of dairy product markets, including higher minimum standards and component pricing;

(c) Continued support for research which leads to improved production efficiencies, including research efforts in mastitis control, reproduction problems, and genetic improvement;

(d) Re-instatement of Extension Service budgets to reasonable levels.

### STATEMENT

I am Donald Long, Weyauwega, Wisconsin. My brother and I farm in partnership at Weyauwega. We operate a 250-cow registered Holstein farm. I am President of National Dairy Herd Improvement Association, Inc. (National DHIA), which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program (NCDHIP). The NCDHIP provides computerized dairy farm management data; the program is the basis for national genetic evaluations; it provides information for sound artificial insemination and breed improvement programs. It is the basis for many research and education programs. We appreciate the support of the U.S. Department of Agriculture in these programs.

For several years, dairy farmers in National DHIA have urged a redirection of funding to support dairy product research to improve per capita consumption of dairy products. In addition, the dairy industry and the Forum for Animal Agriculture (an alliance of 24 livestock organizations representing dairy, beef, swine, sheep, horses, poultry, dairy goats and small meat animals) have been on record supporting "product research and distribution efficiency" as the highest priority research. In the long run, along with the whole-herd buy-out, government expenditure for research to expand markets is much more rational than purchase of surplus products.

Even with improvements in marketing efficiency, dairy farmers must continue to improve production efficiency. Eventually, dairy farmers in the United States need to become so efficient they can compete in the **world** market.

We believe reductions in Extension Service budgets for fiscal 1987 were unnecessarily severe and come at a time when farmers can ill-afford to lose the assistance of Extension. However, we also encourage the Extension Service and extension system to organize for the needs of the 21st century by setting reasonable priorities, adopting national electronic information technology, focusing on "whole-farm" education, redirecting limited resources, and limiting its activities to its base of support in agriculture.

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(d) Re-instatement of Extension Service budgets to reasonable levels.

## EXTENSION SERVICE EDUCATION PROGRAMS

We agree with Administration efforts to reduce fede~~ral~~ deficits. We think the proposed cuts in the fiscal 1987 budget for Extension Service are unnecessarily severe. We hope Congress will consider re-instating much of the $203 million reduction.

Extension has long and successful experience in serving as an information provider, resource, advisor and consultant to agriculture. Much of the success of agriculture is a tribute to its counsel. **However, as the future of Extension is considered, we believe there is an opportunity to study an appropriate role for Extension as it attempts to prepare for the 21st century. We are convinced there is need for greater national coordination, a re-evaluation of Extension priorities, and an overhaul of the Extension method.**

### (a) The Dairy Industry in the Year 2000

In order to identify priorities for Extension, one can study the characteristics of one segment of agriculture, the dairy industry, to gain clues. From dairy, one can extrapolate to the more general perspective of all agriculture. From that, one can identify the appropriate priorities and roles of Extension.

Today, there are 200,000 commercial dairy farms in the United States. These farms have 11 million cows. These are family farms. They average 37 cows per herd. Production levels average about 12,300 pounds of milk.

Dairy herd improvement (DHIA) enrolls 1/3 of the herds and 45% of the cows. DHIA production is 5,000 lbs. above non-DHIA. Herd size is 73 compared to 27. Three thousand DHIA employees go to the farm one day a month and record milk weights and other vital data by hand. Most of this work is done during milking. Milk samples move by refrigerated truck or UPS to about 70 DHIA component analyses labs for butterfat, protein, and somatic cell testing. The biggest lab handles 400,000 samples a month.

Farm data are sent by mail to one of nine regional DHIA mainframe computers; lab analyses are sent electronically. Inputs are merged at the mainframe and management information summaries are prepared and mailed to the farm. All this takes 5-12 days, depending on locations and efficiency.

About 500 farms have varying degrees of computerization linked to DHIA regional centers, at this point providing sophisticated options and lists for day-to-day management. DHIA's electronic network, DAIRY NET, is not yet being used for routine DHIA transfer of data. It's a complex system, but it's cumbersome, too; and, dairy farmers increasingly want information instantaneously!

In 1985, Dr. Lew Mix at Agway confirmed National DHIA's 1990 study and went beyond. Mix projects 88,000 commercial dairy farms by 2000, with 7.8 million dairy cows. Production per cow will be at 16,000 pounds of milk, even if there is no somatotropin (growth hormone). It could reach 20,000 pounds of milk with 100% adoption of growth hormone. U.S. population will inch up to 260 million. Consumption should be up about 15%, but total dairy income probably may be no higher than it is now ($18 - $19 billion).

The world of the year 2000 will be one in which computers are everywhere, in tractors, in planters, in feeding systems, in milking systems and in farm offices. Milking regimens will include automatic electronic I.D. and body temperature. Farm computers will be linked to an electronic information and decision-aid network like DHIA's DAIRY NET. Daily management action lists will be the heart of management information systems.

DHIA will be integrated with computerization on the farm. Instantaneous management records will be specifically tailored to each farm. This long-term trend, already begun, to decentralize record computation foretells nine regional DHIA centers with 50,000 or more satellite computers on individual farms.

Component analyses, including butterfat, protein, lactose, and mastitis tests may be run "cow-side." Electronic DHIA labs have centralized from 1,000 labs a generation ago to 69 now. In the next generation, component analyses may decentralize. Decentralization means identifying cows, weighing and analyzing milk, and computing records, everything we now do in DHIA, will be complete before the milk cools off. Ironically, it is full circle from where DHIA started.

DHIA supervisors will be consulting technicians whose expertise is in monitoring sophisticated testing equipment and computer programs. DHIA's work force will be much smaller as automation cuts DHIA labor at the farm.

Whether DHIA survives or not, 88,000 dairy farmers will! Whether DHIA participates in the technological revolution going on the dairy industry or not, it's going to take place.

(b) Extension in the Year 2000

Exactly the same statements can be said for Extension. Whether Extension participates in the electronic information revolution or not, it's taking place. With or without Extension, it's going to happen.

To extrapolate from the specific to the general, it's obvious Extension's clientele, by the year 2000, will be smarter, better trained, high-tech, operating in fast-moving national networks, and expecting high-tech, profitable, and innovative answers from advisors, whoever they will be. This is the world Extension will counsel and advise.

DHIA conceivably may not move fast enough to have any impact on what performance testing and recording is in the year 2000. Extension may not adjust to the technological/computer revolution fast enough to have any impact on education and information dissemination in the year 2000.

If Extension will be an educator, an information provider, an advisor, and a consultant to agriculture, it must make some changes. Extension has plenty of competition, just as DHIA now does. Here is what realism dictates Extension should gear up for in the year 2000:

1. Electronic Information Information dissemination will be concentrated in national networks and national databanks. Extension needs to recognize the need for national electronic technological communications and contribute to their development. Individual states should not go it alone. Handbooks and fact sheets should become part of the electronic data base accessible with "key-word search." Commercial networks will welcome Extension as an "information provider," and, these networks may even pay for the information.

   Food Animal Residue Avoidance Databank (FARAD), funded by Food Safety Inspection Service at a level of $250,000 in 1986 is an example of a small working databank. Now, we learn funding has been dropped in 1987. It doesn't make sense.

2. "Whole Farm" Concept The integrated concept is excellent, but it needs to go electronic, too. "Decision-aid" software is a high priority, so a farmer can tell

what a decision in corn growing means to the bottom line in the dairy enterprise, for instance.

"Decision-aid" software can be downloaded from that national data bank. Farmers are not going to go to the county agent's office to access it, either. Farmers in 2000 have their own computer.

3. Redirection of Resources Extension has 25% less budget (in constant dollars) than 20 years ago, but only 2% less employees. Administrators have taken operational dollars and shifted them to cover salaries. Extension can do a more effective job by using the new technologies, and it's equivalent to having more people.

Extension must get used to less employees and then give the employees the tools to be efficient. Electronic information, for example, is one answer. County agents may be obsolete.

4. Base in Agriculture Extension cannot be all things to all people. Extension's support is in agriculture.

Extension gained its reputation by being at the right hand of farmers as they have moved into the age of technology. Extension has helped farmers to be profitable by advising them how to make good decisions. Extension helped farmers' wives by teaching them how to be partners in the business of farming; and Extension 4-H worked with children of farmers getting them ready to be the next generation of producers and citizens.

Extension began to lose support when it proliferated beyond its agricultural base. Farmers and/or agriculture is the only base Extension has. Extension should get back to its agricultural roots.

In summary, Extension will be, like DHIA, a far different institution in 2000. Extension needs to:

(a) Develop information technologies with strong emphasis on national coordination;

(b) Provide the necessary technological tools to support Extension workers so each is as productive and efficient as possible; and

(c) Concentrate on agriculture.

## PRODUCT RESEARCH

National DHIA continues to urge product research for a number of rational reasons:

(a) The nutritional well-being of children who increasingly are addicted to soft drinks;

(b) Assurance that the marketing system emphasizes quality and product salability;

(c) Development of new products to increase consumption of dairy products and reduce expenditures for storage of surplus products;

(d) Continued efforts to reduce cost of processing, storing, and transporting milk and milk products; and

(e) Benefits received by consumers as well as producers from product research.

Following is a listing of high priority research project needs:

(a) Genetic engineering to improve dairy products.
(b) Concentration of milk at the farm level.
(c) Ultrapasteurization and aseptic packaging.
(d) Ultrafiltration for yield improvement in cheese.

(e) Concentration of whey at its place of origin.
(f) Whey utilization for food and non-food.
(g) Milk quality uniformity.
(h) Milk fat utilization.

In recent years, the U.S. Department of Agriculture, faced with mounting surplus dairy products, has indicated a willingness to support product research. We appreciate this support and believe continued effort is in the best interests of farmers, consumers, and taxpayers.

## PRODUCTION EFFICIENCY RESEARCH

Although production efficiency of the dairy industry far surpasses its marketing efficiency, efforts must continue to improve efficiency at the farm level. Research should continue, too, because there is a long lead-time from research initiation to farm adoption of new techniques. Dairy farmers hope Congress will continue to encourage maximum productive efficiency. Both farmers and consumers benefit.

### Mastitis Research

Mastitis is the primary disease problem of dairy cattle (cost $1 billion annually).

Some believe mastitis control is merely an application of current knowledge, but dairy farmers believe only a small part of needed research has been completed. As herd size increases and mechanization/automation takes place, research and information are more essential than ever. As an example, DHIA dairy farmers pay for monthly mastitis detection on 3 million cows. Follow-up research and communication are essential to supplement the detection system.

The following mastitis research needs were developed by the National Mastitis Council:

1. Milking Equipment and Mastitis

   There are few reliable data defining characteristics of milking machines that influence incidence and severity of mastitis.

2. The Dry Period and Mastitis

   New methods of treatment and prophylaxis in the dry period are needed.

3. Specific immunity and immunization

   There is need for study of mechanisms of immunity and potential effective vaccines.

4. Non-Specific Resistance

   Resistance research areas include integrity of the teat canal barrier to infection, phagocitosis in the mammary gland and various antibacterial factors in milk and dry period secretions.

5. Integrated Mastitis Control Program

   Development of integrated mastitis control systems requires validation of management practices which minimize the incidence of clinical mastitis, the level of subclinical infection and production loss.

### Reproduction Research

Dairy farmers consistently rate the needs for reproduction research second only to mastitis. Farmers rate reproduction research priorities in this order:

1. Estrus detection
2. Retained placenta
3. Cystic ovaries

4. Abortion-embryonic death
5. Reproductive disease (bruccellosis, leptospirosis, vibriosis, low-grade infection, etc.)

National DHIA and dairy farmers appreciate the response of the U.S. Department of Agriculture and the scientific community in developing the national project Integrated Reproduction Management so farmers have available a package which solves problems at the farm level. We encourage continued development.

### Genetic Research

National DHIA appreciates the support of Congress and the U.S. Department of Agriculture in maintaining dairy research at the Animal Improvement Program Laboratory. Resulting dairy cattle sire and cow evaluations have contributed significantly to production efficiency progress in dairy. To ensure continued genetic improvement, DHIA dairy farmers encourage the continuation of this important research.

## SUMMARY OF RESEARCH AND EXTENSION PRIORITIES

1. Re-instatement of Extension Service Budgets
2. Dairy Product Research/Processing-Distribution Efficiency
3. Mastitis Research
4. Reproduction Research
5. Genetic Research

## United Fresh Fruit and Vegetable Association

## STATEMENT OF ROBERT C. KEENEY, VICE PRESIDENT OF GOVERNMENT RELATIONS

Senator Cochran. Our next witness this morning is Mr. Robert C. Keeney, who is vice president of the United Fresh Fruit and Vegetable Association.

Mr. Keeney, welcome.

Mr. Keeney. Good morning.

I am Robert Keeney, vice president of government relations for United. United is the national trade association for the fresh produce industry. Our members handle over 80 percent of the fresh produce commercially marketed in the United States.

In the interest of time, I will summarize my remarks. I would like to address today three programs of primary concern to the industry: the Medfly Eradication Program under APHIS; the cooperator program under the Foreign Agricultural Service; and the establishment of a research facility in the Far East under ARS.

### MEDFLY ERADICATION

The medfly is a serious pest and one of the most feared by U.S. fruit and vegetable growers. The last major invasion of medfly occurred in California in 1980 and 1981. It cost the United States $300 million in lost production and eradication costs, in addition to lost export markets. The U.S. produce industry cannot afford another major invasion.

The question is not if there will be an invasion, but when.

The United States, in cooperation with Guatemala and Mexico currently maintains a medfly barrier at the Guatemala-Mexico border. At the request of the Senate, APHIS and the Food and Agriculture Organization of the United Nations prepared a report outlining a technically sound and internationally funded program to establish a barrier at the Darien Gap in Panama. By pushing the current Mexico-Guatemala barrier southward to Panama, the risk of infestation in the United States is substantially reduced.

In order to undertake this expanded eradication program, USDA has estimated that $20 million will be needed in fiscal year 1987. Although this would be an internationally funded program, it is important that the United States take the lead, while there is still interest among Central American and developed countries alike.

It is our understanding that the interest in supporting this effort, both financially and with in-kind contributions, has been expressed by the Central American nations and a number of developed countries.

We understand that USDA is prepared to begin the expanded program once they have direction from Congress.

## FAS COOPERATOR PROGRAM

The Foreign Agricultural Service's cooperator program is a unique private-public cooperative system to develop markets abroad for U.S. agriculture. Financing from these activities comes from 60 private cooperators, from foreign businesses and government agencies, and from FAS appropriated funds.

The U.S. Agricultural Export Development Council will be testifying later today on this program, so I will not go into details of its operations or benefits. The proposed 50-percent reduction will not only mean an abrupt curtailment of market development activities, but will also force a reduction in representation and staffing in foreign markets. At a time when the export markets show signs of improving, we need to strengthen, not weaken, our efforts.

U.S. growers feel there is an urgent need to reduce nontariff trade barriers which prevent American produce from moving freely, especially to Asian markets. A major obstacle is the lack of acceptable treatment protocols, as well as the lack of inspection for arrival condition of produce.

## ARS FACILITY IN JAPAN

United feels that it is necessary that the ARS take aggressive action to support the efforts of FAS and APHIS by conducting research on necessary shipping tests of fresh produce.

It is our understanding that USDA is pursuing the establishment of a research facility in the Far East. It would contribute significantly to eliminating unfair trade practices in addition to resolving legitimate concerns of importing countries regarding produce condition, market quality, and insect infestation issues.

We urge this subcommittee to provide the needed direction in report language to ARS, to implement this program in a timely manner.

Thank you, Mr. Chairman, and members of the subcommittee for this opportunity to comment on these important matters. I would be happy to answer any questions you may have.

Senator COCHRAN. Thank you very much for your testimony, Mr. Keeney. We are very interested in making sure that funds are available to control such things as medfly and other infestations of plants that pose a threat to our society generally.

You mentioned your opinion that it is not a matter of whether we are going to have another outbreak, but when, as I understand it. What makes you so confident that that is inevitable?

Mr. KEENEY. Well, I am afraid it is, because we have experienced, over the last few years, a number of instances in Florida, Texas, and California. Fortunately, these were very small outbreaks of fruit flies, but certainly it can happen to a large extent. Also very fortunate was that it was not in commercial growing areas.

Senator COCHRAN. Well, this committee is going to be very interested, I think, in making sure that the Department does respond to those emergencies and that we combat those pests and do so in an environmentally sensitive way, too, so that we do not do more damage in some other way to our environment.

That will be a concern as we monitor that and make sure that the funding levels are adequate. I hope we will have some kind of response from the committee, and I think we will.

Your being here is helpful. We know it is a matter of great importance to the industry you represent. The economic future of the industry depends on our ability to deal with these threats.

Thank you for being here. We appreciate your testimony.

[The statement of Mr. Keeney follows:]

## STATEMENT OF ROBERT C. KEENEY

Good afternoon, Mr. Chairman and members of the subcommittee. I am Robert C. Keeney, Vice President of Government Relations for the United Fresh Fruit and Vegetable Association, Alexandria, Virginia. United is the largest and oldest national trade association for the fresh fruit and vegetable industry. The 2,500 member companies, including growers/shippers, brokers, wholesalers, retailers and affiliated industries, handle over 80 percent of the fresh produce commercially marketed in the United States.

I would like to address today three programs of primary importance to the fresh produce industry:

1) Additional appropriations of $11.4 million for the Mediterranean Fruit Fly Eradication Program under APHIS;

2) Retention of public funding of the Cooperator Program under the Foreign Agricultural Service; and

3) Direction from Congress in the form of report language urging the Agricultural Research Service to pursue actively the establishment of an ARS research facility in the Orient.

### CENTRAL AMERICAN MEDITERRANEAN FRUIT FLY ERADICATION PROGRAM

Medfly is a serious pest and one of the most feared by U.S. growers. The medfly infests many crops of primary importance to the economies of California, Florida, Texas and several other states. Preferred hosts include among others, citrus, peaches, apricots, nectarines, cherries, avocados, apples, pears, plums, and approximately 60 other fruits and vegetables. Medfly destroys the fruit making it unmarketable.

The last major invasion of medfly occurred in California in 1980 and 1981. It cost the United States $300 million in lost production and eradication costs. This cost does not include the millions of dollars lost in export markets which U.S. growers are still trying to regain. The estimated annual loss attributable to an established medfly infestation in California and Florida would cost between $3.2 billion and $4.6 billion. U.S. agriculture simply cannot afford another major invasion. The question is not if there will be an invasion, but when.

From 1955 to 1977, the medfly spread through Central America. In 1977, following the spread into Mexico, a cooperative program between the U.S. Department of Agriculture (USDA) and the Ministers of Agriculture from Mexico and Guatemala was organized to prevent further movement throughout Mexico into the United States. This program has been successful beyond expectations.

At the request of the Senate, the Animal and Plant Health Inspection Service (APHIS) and the Food and Agriculture Organization (FAO) of the United Nations prepared a report outlining a technically sound and internationally funded program to establish a barrier at the Darien Gap in Panama. By pushing the current Mexico/Guatemala barrier southward to the Darien Gap in Panama, the risk of infestation is substantially reduced.

It is our understanding that APHIS originally had requested $20 million for the expansion of medfly eradication efforts for fiscal year 1987; however, the Office of Management and Budget deleted all but $8.6 million which is only enough to maintain the current barrier.

Because this would be an internationally funded program, it is important that the United States take the lead while there is still interest among Central American and developed countries alike. The FAO has already spent or committed $750,000 on the initial background work for this program. FAO is ready to call a donors' conference as requested by Secretary John Block to receive firm commitments from other nations. A donors' conference cannot be successful without a firm, up-front commitment from the United States which has been the initiator of the project and will be a major beneficiary. It is our understanding that interest in supporting this effort both financially and with in-kind contributions has been expressed by the Central American nations and a number of developed countries.

FAO and APHIS currently are evaluating two implementation programs; one is a nine year program which would cost approximately $350 million; the second is an eight year program which would cost $310 million. The plan in the nine year program is to work southward from the Mexico/Guatemala border to the Darien Gap. Under the eight year program, eradication efforts would work southward as well as northward from the Darien Gap in a pincher effect.

It is time now for the Congress to direct USDA to undertake this program before the United States experiences another devastating medfly invasion. Not only will eradication efforts provide added protection to U.S. crops, but eradication will have a significant beneficial impact on the pest free movement of agriculture crops offseting to some extent the loss of ethylene dibromide, a post harvest fumigant banned for most uses by the Environmental Protection Agency in September 1984.

Even during these times of budget restraint, this effort is certainly a prime example of the maxim, "An ounce of prevention is worth a pound of cure." U.S. agriculture simply cannot afford another medfly infestation in eradication costs, lost production and lost export markets. This is a vitally important program, and one that is ready to move on all fronts. All USDA needs is a commitment from the U.S. Congress to move forward. The medfly directly threatens the American fruit and vegetable industry not just in the future, but now and every year.

## COOPERATOR EXPORT PROMOTION PROGRAM

Three decades ago, the Congress created an aggressive foreign market development program for agricultural exports in P.L. 480. A unique public-private cooperative system has evolved since then to develop markets abroad for U.S. agriculture and related industries. The public partner in the system is the Foreign Agricultural Service (FAS) of the U. S. Department of Agriculture (USDA). The private sector is representated by 60 "cooperator" groups which work to develop markets in 130 countries. Financing from these activities comes about equally from the cooperators, from foreign businesses and government agencies, and from FAS appropriated funds.

Since the purpose of the program is long term market development, it is very important that funding be consistent particularly during these difficult times currently facing U.S. agriculture. Coupled with a $1.6 million reduction in outlays, the proposed fiscal year 1987, 32 percent reduction in funding for this program amounts to a 50 percent reduction in funding. This is not consistent with the emphasis on promoting agricultural exports in the recently approved 1985 Farm bill. A 50 percent funding reduction will not only mean abrupt curtailment of market development activities, but also will force a reduction in representation and staffing in foreign markets. At a time when the export markets show signs of improving, we need to strengthen, not weaken, our efforts.

AGRICULTURAL RESEARCH SERVICE

There is an urgent need on the part of U.S. producers to reduce non-tariff trade barriers which prevent American produce from moving freely, particularly into Asian markets. A major obstacle is the lack of acceptable treatment protocals as well as the lack of inspection for arrival condition of produce.

It is necessary that the Agricultural Research Service (ARS) take aggressive action to support the efforts of the Foreign Agricultural Service and the Animal and Plant Health Inspection Service by conducting research on necessary shipping tests of fresh produce. The development of long term, close personal relationships between USDA research personnel and Asian agricultural regulatory agencies would be the keystone of future progress in opening markets to American fresh fruits and vegetables.

It is our understanding that USDA is pursuing the establishment of a research facility in the Near East. United believes that this vital research would be best conducted through the establishment of an agricultural research center in Yokohama, Japan. This research center is judged by the produce industry to be the most effective single step that the ARS can take to expand trade and help adjust the unfavorable trade balances with several major Asian countries. It would contribute significantly to eliminating unfair trade practices in addition to resolving legitimate concerns of importing countries regarding produce condition, market quality and insect infestation issues. We urge this subcommittee to provide the needed direction to ARS to implement this program in a timely manner.

Thank you Mr. Chairman and members of the subcommittee for this opportunity to comment on these three very important matters. I would be happy to answer any questions you may have.

## AMERICAN HOME ECONOMICS ASSOCIATION

### STATEMENT OF DR. ELIZABETH ELLIOTT, MEMBER

Senator COCHRAN. At this time, I am going to turn the hearing over to the distinguished Senator from Iowa, Mr. Harkin, who will preside while I visit with some others who are here to talk about another subject.

Thank you very much for taking over.

Senator HARKIN [presiding]. Thank you very much, Mr. Chairman. Our next witness is Dr. Elizabeth Elliott, executive director of the Home Economics Association. She is someone who looks familiar to me. Dr. Elliott is currently associate dean and State leader for home economics programs in the Extension Service for the State of Iowa. From this position at Iowa State University, Dr. Elliott directs home economics programs for the entire State.

Dr. Elliott received her Ph.D. at the University of Wisconsin, worked in Extension in Wisconsin and Minnesota before coming to Iowa.

I know that Dr. Elliott has a farm background and a special interest in farm family problems. Currently, Dr. Elliott is working closely with rural family stress resulting from the current farm crisis in Iowa.

Dr. Elliott, welcome to the subcommittee. Please proceed with your testimony.

Ms. ELLIOTT. Thank you, Senator Harkin. We appreciate your interest and efforts on behalf of funding for the Cooperative Extension Service of the U.S. Department of Agriculture.

I represent the American Home Economics Association, a professional organization of 25,000 men and women with professional and technical expertise to integrate knowledge from the basic disciplines to help families solve the complex problems of family life, efforts that in home economics are primarily through prevention, development, and education.

The budget proposal presented to the Congress in February recommended a reduction of funds for the Cooperative Extension Service. The budget also recommended that remaining Federal funds be channeled away from home economics and youth efforts.

I am here today to urge you to support continued funding for Extension programs. With this testimony, I would like to correct any misunderstandings about Extension home economics' priorities by sharing with you information about current programs that focus on the role of a family in food, nutrition and health, financial management, and personal and emotional well-being.

The well-being of American families is essential to national strength, since the values that underlie national stability are forged by families. Pressure brought to bear on families as a result of social and economic changes has made them an object of concern. Through its home economics programs, Cooperative Extension strengthens families by providing them research-based knowledge that can be applied to development of skills requisite to economic stability, physical well-being, and personal and emotional well-being.

## HOME ECONOMICS EXTENSION PROGRAMS

I would like to cite some examples from Home Economics Extension programs. Nearly all States are responding to the farm family financial stress issue, with the focus toward both agriculture production and family life issues. Materials on farm family stress developed by home economists in Iowa, Nebraska, Minnesota, Michigan, and Missouri, have been made available and are being used in other States where large portions of the farm population are experiencing severe stress due to financial problems.

Self-study or home study programs have been an effective way for reaching farm families on stress management in Iowa. In 1985, more than 1,800 farm families participated in a home study course on farm family stress, and as a result, they report more effective family communications and more family activities. In addition, over 1,600 health professionals used the nutrition concerns and controversies home study unit last year, and more than 75 percent of that group indicated they had made one or more changes in their food habits.

The Expanded Food and Nutrition Education Program is another program that changes the lives of the people who participate. It is an effective method of providing nutrition education to low-income families with young children. The paraprofessionals who do the teaching in that program have helped families change their food consumption patterns significantly. The program has changed through the years using innovative delivery methods and improving the cost effectiveness of the program.

Extension home economics programs make important contributions to human capital development through the extensive involvement of volunteers. A recent study by the University of Wisconsin Extension indicates that volunteers contribute 51 hours of time to Extension work for every hour of Extension professional staff time spent. Extension funds, Federal, State, and local, are used to support these volunteer education programs.

Without funding and the availability of leadership development programs provided by Extension home economics, volunteers are less likely to be available for the many roles they fill in communities throughout this Nation.

Finally, I would like to say that the President's concern for strong, self-sufficient families is a legitimate concern. That cannot happen in a vacuum. Should the Federal Extension funds be eliminated for home economics, the human capital contributions through families will decrease. If people do not continue to develop skills to assure self-sufficiency in economic, health, and personal well-being, our society will experience greater costs as more families rely on others to provide their safety nets at Federal, State, and local levels.

The American Home Economics Association supports a rejection of the President's budget proposal. Specifically, I refer to the Smith-Lever funds under section 1440 of the 1985 farm bill and recommend the following: Rejection of any restriction for use of funds for agriculture production only, allowing the funds to be used to meet the needs of the people in the States, whether they need educational programming in agriculture, home economics, 4-H, or community resource development.

We also support funding for Smith-Lever at 5 percent above the fiscal year 1985 level, and we support full funding for the Expanded Food and Nutrition Education Program.

On behalf of the American Home Economics Association, I want to thank you for the opportunity to discuss the importance of Extension home economics' programs and the critical nature of Federal support for these programs. We appreciate your support in the past and urge you to consider these recommendations.

I will be happy to respond to any questions you may have.

## REMOVING MISCONCEPTIONS

Senator HARKIN. Dr. Elliott, thank you very much for a very fine statement and for condensing it to the 5-minute limit, as our chairman has indicated.

I just wanted to make one statement and perhaps ask one question. The home economics portion of the Extension Service, while it may be well understood by those who are involved in it, and at least by those who receive its services, I tend to think that it has a misconception by people who are on the outside, who are not involved or who are not recipients of those services. After all, they say, "home economics—give me a break. Home economics maybe in years gone by was important, but not so important any longer." I do not think they understand the breadth of the different kinds of counseling that you do, the types of budgeting work that you do with families in terms of how to more wisely save and spend their money.

All of those are very important aspects, as you said, of cohesive family life. If there is some way of getting the word out or getting a better visibility of what you do, I would encourage that. I don't know how.

Ms. ELLIOTT. Thank you. We recognize that problem. The home economics community at large is hard at work at that. We have a marketing problem that we are working on. We have seen enlightenment in several quarters. We are optimistic about that.

Senator HARKIN. The question I have involves volunteers. The volunteer program that you talked about, is that true in other States? You mentioned one State, Indiana. Do you find that kind of volunteer effort in most States?

Ms. ELLIOTT. That volunteer effort is nationwide. Mrs. Broadaway was here earlier from Arkansas and discussed the kinds of things she had done in that State. As I said in my testimony, for every 51 hours of volunteer time spent in Extension programs, there is 1 hour of professional staff time. Volunteers are the backbone of our program.

Senator HARKIN. Again, Dr. Elliott, thank you very much. I am hopeful and somewhat confident, not entirely confident, that we will restore some of these and it will not be cut drastically. As I said before, we all take little cuts here and there, I suppose. If I am not mistaken, the Extension Service was cut 60 percent overall.

Ms. ELLIOTT. Yes.

Senator HARKIN. I think that is a bit too much.

Ms. ELLIOTT. It is too drastic.

Senator HARKIN. Thank you, Dr. Elliott.

Ms. ELLIOTT. We thank you.

[The statement of Ms. Elliott follows:]

## STATEMENT OF ELIZABETH ELLIOTT

Mr. Chairman and distinguished members of the Subcommittee, thank you, for your interest in, and efforts on behalf of funding for the Cooperative Extension Service of the U.S. Department of Agriculture. I represent the American Home Economics Association, a professional organization of 25,000 men and women with professional and technical expertise to integrate knowledge from the basic disciplines to help families solve the complex everyday problems of family life—efforts that in home economics are primarily through prevention, development and education. In addition, I have been employed by the Cooperative Extension Service in four states all of my professional career.

The budget proposal presented to the Congress in February of 1986 recommended a reduction in funds for the Cooperative Extension Services. The budget also recommended that remaining federal funds be channeled away from Home Economics and Youth efforts. I am here today to urge you to support continued funding for Extension.

With this testimony I would like to correct any misunderstandings about Extension Home Economics priorities by sharing with you information about current programs that focus on the role of the family in food nutrition and health, financial management, personal and emotional well-being.

Families are the thread that holds the human race and ultimately, the society together. "The well being of American families is essential to national strength since the values that underlie national stability are forged by families. Pressure brought to bear on families as a result of social and economic changes has made them an object of much concern." Through its Home Economics programs, Cooperative Extension strengthens families by providing them research-based knowledge that can be applied to development of skills requisite to economic stability, physical well-being and personal and emotional well-being.

The competencies developed through educational experiences in families provide society with individuals who are and will be responsible for maintaining the society. Strengthening American families by teaching them to apply research-based knowledge has been a major mission of the Cooperative Extension Service since 1914." This is consistent with the President's current concerns for families "taking care of their own" and "creating ladders of opportunity" as they remain the "core of our society" as mentioned in his State of the Union message in February 1986.

Extension Home Economics programs, through the Land Grant system, have made available to families research based adult education programs which are preventative and encourage problem solving in terms of the economic, physical, and emotional well being of the people of this nation. Economic instability, changing values and expectations make it imperative that families develop the skills to anticipate change, direct change as that is possible, and cope with change in ways that promote growth and strength rather than feeling stress and failure.

From the early years of dealing with rural poverty to the threshold of the 21st Century, Extension Home Economics has evolved programs which address the pressure points in the American family—food, diet and health, resource management and personal consumption patterns, and the development of people and relationships.

For example, nearly all states are responding to the farm family financial stress issue with a focus toward both the agriculture production and family life issues. The network of resources available from and facilitated by federal monies has provided research, educational materials and techniques which have been adapted and implemented by many states. The multiplier effect of payoff for the taxpayer's investment in human and financial resources used to develop materials in one state transferred to another is often 5 to 10 times the initial resource output. Materials on farm family stress developed in Iowa, Nebraska, Michigan Missouri and Minnesota have been adapted for use in other states where large portions of the farm population are experiencing severe stress due to farm financial issues.

Thus, while the educational programs provided in 1985 to address family life issues are quite different from those of 1915, they have made it possible for families to assume responsibility for solution of contemporary problems. In terms of the eighties, they have made it possible for many families to assume responsibility for their own 'safety net.'

## Critical Nature of Home Economics Extension Today

In the early part of this century, the problem in education for adults focused on 'no information.' Today the problem is sorting good information from bad, developing the 'thinking skills' that make it possible to apply objective criteria to determine quality of information.

When the Land Grant Colleges were established with the Morrill Act in 1862, they brought a practical approach to education that linked the classroom and the campus to national expansion. The challenge today is to help families cope with communication technology, the information explosion, and the world economy/society.

The information glut society in which we have a lot of cheap information provided by self-proclaimed experts, with much of it harmful to people—physically, economically, or in terms of human development--makes it imperative that Home Economics Extension provide research-based, objective information to people, at the same time that people further develop their skills for evaluating the validity and usefulness of information for coping with the problem at hand.

International trade practices have created a world economy that influences income patterns as well as the options families have for buying consumer goods. Families need to have these interpreted and develop thinking and other skills which make it possible for them to be contributing members of the society. The base for family economic stability is a constant income source. When national policies change this economic stability for families, it is essential that family members develop new skills so they may re-establish a stable economic base. Michigan is providing educational programs that help farm families develop these very skills.

Individuals and families must have good information and be able to interpret it to effectively use their food dollar, assure the best possible health for later years and use effectively the quality food supply available through U.S. Agriculture. Home economists help consumers understand the relationship of diet and health and the relationship between chronic disease and alternative eating patterns. Agricultural producers need to understand the health related concerns of consumers and be responsive to the high interest in food safety, concerns about additives and the micro-biological safety of food. Home economics programs are making important contributions in this area.

## Payback to the Society on Taxpayer Investment

The benefits of the shared funding of extension programs are readily apparent. That every Federal dollar is matched by two dollars of state and local money is a good investment. As a personal investor I would welcome a two for one return on my dollar.

In addition, we can add to Extension's productivity the value of volunteer time. A recent program impact analysis conducted by the University of Wisconsin indicates that volunteers contribute 51 hours of time to Extension work for every hour of agent time. Extension funds—federal, state, and local—are used to teach volunteers how to teach others, to develop problem solving skills for participation in community development or management and other support activities for educational programs. Without funding and the availability of leadership development programs provided by Extension Home Economics, volunteers are not likely to be available for the many roles they fill in communities throughout this nation.

More than 60 percent of volunteers report they have increased greatly their skills for peer teaching. Many volunteers use the teaching skills to teach other groups. As an example of this in Indiana, a budgeting program, "Saving Dollars When you Don't have a Dime," was taught 120 times to 3,800 volunteers by Extension Home Economists. The volunteers then taught the same lesson to 6,200 citizens throughout the state. An evaluation of the program found that 70 percent of the participants found ways to save money. The average saving was $283 per household. That translates to $1.9 million of flexibility in spending for the 70% of 7,000 households. This is a good return on an investment of approximately $3000, of which approximately $1000 was federal money.

The Expanded Food Nutrition Education program (EFNEP) provides another example of a program that changes the lives of the people who participate. EFNEP is an effective method of providing nutrition education to low income families with children. The paraprofessionals who do the teaching (many of whom have been in similar low income situations) have helped families change their lifestyles at the same time they have changed their food consumption. About 235,000 families participated in the program in 1985, representing 869,000 family members and 435,000 youth in 4-H EFNEP. The program has changed through the years using innovative delivery methods and improving the cost effectiveness of the program. EFNEP is a viable program and has a proven record of success. Participating adults in families get GED's, college degrees and jobs. These people are now taxpayers and no longer depend on the welfare system. Paraprofessionals and EFNEP homemakers alike are on the "ladder of opportunity to employment" that the President described in his State of the Union address in February.

Finally, it is significant to reiterate the importance of the Land Grant connection as it facilitates cooperation among the states. This too, is a payoff. Although cooperation may occur without formal networks, a formal nationwide network improves the efficiency with which resources are shared. For instance, in the North Central Region, a special project involved the Extension Family Life Specialists in Iowa, Michigan, Minnesota, Missouri and Nebraska to develop educational materials using the research base from a regional family stress project. Those materials have been duplicated and are being used throughout the North Central states and in other states throughout the nation.

There are countless other payoffs from Extension Home Economics in terms of developing educational networks which are not as easily measured or described, but if you talk to your constituents they can tell you Extension Home Economics makes a difference in their lives.

## Getting the Educational Program to the People

Extension Home Economists are providing programs to people where they are, regardless of geographic location, mind set, mental ability, or economic status. They connect local needs with national priorities.

The creativity in program delivery includes the sophisticated interactive video-disc, video tapes, satellite delivered programs as well as problem-solving computer programs on nutrition, home insulation needs in energy education, and financial management. Newsletters are particularly effective in reaching new parents and parents of preschool children.

Self-study or correspondence programs have been effective in reaching farm families relative to stress management. In Iowa, more than 1800 families have participated in home study courses on farm family stress. As a result, they say they communicate more effectively, they are participating in more family activities, and are using exercise to help manage their stress. Over 1600 health professionals use the "Nutrition Concerns and Controversies" home study course. More than three-quarters report making one or more change in their diet. Extension Home Economists have taught farm families how to start and maintain groups to provide emotional support during times of economic crisis.

## Conclusion

The President's concern for strong, self-sufficient families is legitimate. That cannot happen in a vacuum. Should the Federal Extension funds be eliminated for Home Economics, the human capital contributions through families will decrease. If people do not continue to develop skills to assure self-sufficiency in economic, health, and personal well-being, our society will experience greater costs as more families rely on others to provide their "safety nets" at Federal, state, and local levels.

## Recommendations

These recommendations support a rejection of the President's budget proposal. Specifically, I refer to Smith-Lever funds under Section 14 of the 1985 Farm Bill and recommend the following:

1. Rejection of any restriction for use of funds "for agriculture production only", allowing the funds be used to meet the needs of the people in the states, whether they need educational programming in agriculture, home economics, 4-H or community resource development.

2. Funding for Smith-Lever at 5% above the FY '85 level.

3. Full funding for EFNEP.

Summary

On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of Extension Home Economics programs and the critical nature of the Federal support for these programs. We appreciate your support in the past and urge you to consider these recommendations. I will be happy to respond to questions.

## THE AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS

## STATEMENT OF JOHN F. KULLBERG, ED.D., PRESIDENT

Senator HARKIN. We're going to go out of order here just for a second, because Senator Cochran wanted to be here for a couple of testimonies.

I am now going to call on Mr. John Kullberg, president of the American Society for the Prevention of Cruelty to Animals.

Dr. Kullberg, welcome to the subcommittee, and we have a copy of your testimony. It will be made a part of the record in its entirety, and I would just ask you now to proceed as you wish.

Dr. KULLBERG. Thank you for the opportunity to make a brief summary statement from my full testimony which has been submitted for the formal record of this hearing.

My name, again, is John Kullberg, and I am president of the American Society for the Prevention of Cruelty to Animals. Founded more than 120 years ago, it is America's first and one of its largest humane organizations.

I am speaking today on behalf of the ASPCA's more than 200,000 members and its contributors nationwide.

My testimony today is with regard to the Animal Welfare Act and the need for an appropriate level of funding for that act, which, as you know, in the budget that the Office of Management and Budget has put forward, has been zero funded in its all-important enforcement arm.

It is important to recognize the unique purview of the Animal Welfare Act. Although all States have anticruelty statutes, there is very little overlap with the Federal anticruelty provisions. Only nine States have laws which touch on any of the protections of the Federal act, and none of these provide for inspection of research facilities. No State statute allows public access to and inspection of federally supported research laboratories. The Animal Welfare Act now does, through its requirement for public representation on animal care committees. In short, citizens who trust that the humane care of animals is being safeguarded by their government depend on APHIS to enforce the Animal Welfare Act.

It is imperative that Congress look beyond OMB's shortsighted recommendation and allocate adequate funding for the Animal Welfare Act and its new amendment. An appropriation of $6,648,850 for fiscal year 1987—and, by the way, I would like to correct my formal testimony; I was $50,000 high—that's $6,648,850 for fiscal year 1987—would allow for the following:

One: A minimum level of enforcement of the Animal Welfare Act. When the Federal Animal Welfare Act is enforced through Federal surveillance, routine inspections, and followthrough, a higher compliance with the Federal requirements for humane treatment of animals is the result.

Two: Prevention of further abuses. A vigilant Federal enforcement arm can stop mistreatment of animals before suffering is compounded and can also prevent problems which may require costly litigation and hours of agency time later on.

Three: Establishment of the Information Service at the National Agricultural Library. The startup costs for this service are estimated by USDA to be approximately $750,000. In return, it is very possible that millions of dollars will be saved. Although researchers may try to avoid it, unnecessary duplication of experiments does occur. All too frequently, research projects are repeated needlessly, and animal lives are wasted. The clearinghouse established through this information service will reduce the chance of duplication, will reduce the time and expense associated with animal research, and will save animal lives and minimize animal suffering.

Second, the Information Service will decrease research costs by making available information on such alternatives as in vitro methods and computer modeling.

### GOVERNMENT RESPONSIBILITY

Finally, funding APHIS to do its job properly will enhance public confidence in the Government and in research institutions. As mentioned earlier, the public is increasingly interested and supportive of animal protection issues. Demonstrations, calls for release of laboratory animals and even break-ins and technically criminal activity to rescue laboratory animals have been most prevalent where APHIS enforcement has been weak or lacking.

The relatively modest appropriation of $6,648,850 would reassure the American public that the humane treatment of animals is indeed a priority for our Government.

I would like to add just one other comment. It is most ironic that in the amendment to the Federal Animal Welfare Act signed in December by President Reagan and pushed through Congress and this Senate by Senator Bob Dole, it is most amazing that this strengthened act comes out of the Office of Management and Budget totally emasculated, because if you don't have a funding arm, the ethical integrity in support of that act will disappear. So I would, with passion, mention to this committee what I believe is its ethical responsibility to see to it that the funding of this act for enforcement of its ethical standards is, in fact, restored.

Senator HARKIN. Dr. Kullberg, there is no doubt that you feel strongly about the issue on the part of this Senator, and I appreciate your interest in this issue and your testimony.

Last year the funding was $4.6 million before sequestration. You are requesting that an appropriation of basically about—well, actually $6.698 million is what you're requesting.

Dr. KULLBERG. $6.648 million, corrected testimony.

Senator HARKIN. Right. Well, the committee has always funded this in the past. I don't know how much we would fund this year, but I would assume it would be at least at the level of last year. I don't know.

Would $4.6 million take care of most of the problems that you outlined, or would that be way too short, do you think?

Dr. KULLBERG. Well, what is very important, in addition to increased enforcement, in this past year what has taken place at the University of Pennsylvania, what has just taken place at Columbia University, my alma mater, this past year has shown us that what many researchers would consider important research projects have been stopped because there has been insufficient oversight on the part of APHIS.

But in addition, what Senator Bob Dole put through in the amendment put on the Federal Animal Welfare Act this year was this Information Service at the Agricultural Library, and that is critically important, because there is too much duplication today, too many wasted animal lives, and the research community just doesn't have, without this support in the act this year, this addition, the ability to make sure that unnecessary duplication is not taking place.

Senator HARKIN. Dr. Kullberg, thank you very much for your testimony.

Dr. KULLBERG. Thank you, sir.

[The statement of Dr. Kullberg follows:]

## STATEMENT OF JOHN F. KULLBERG

Thank you for the opportunity to make a statement. My name is John F. Kullberg, and I am President of The American Society for the Prevention of Cruelty to Animals, America's first and one of its largest humane organizations. I am speaking today on behalf of the ASPCA's more than 200,000 members and contributors nationwide.

When the ASPCA was founded -- 120 years ago last month -- its mandate was to prevent cruelty to animals wherever it occurred. Over the years, we and other animal protection groups have made significant progress in improving the welfare of animals through both hands-on and advocacy work. A major milestone was achieved in 1966 with the passage of the Animal Welfare Act, the only federal law which offers protection to animals in research settings, as well as in zoos and roadside exhibits, circuses, the pet trade, and interstate transit. Since its passage, the Act has been strengthened through amendments several times, most recently in 1985. This latest amendment, the Improved Standards for Laboratory Animals Act, would promote laboratory animal welfare (1) by establishing an information service designed to prevent duplication of experiments; (2) by strengthening oversight through required public representation on animal care committees; and (3) by requiring training for animal care personnel. Passage of this amendment comes at a time of increasing public interest in animal protection, and there was and is strong public support for this legislation.

In light of this, it is extremely disturbing to see that the Office of Management and Budget, ignoring the will of Congress and the public, has again recommended zero funding for enforcement of the Animal Welfare Act. This move would effectively wipe out the provisions of the new amendment, along with the Animal Welfare Act itself. With no budget, the Animal and Plant Health Inspection Service (the agency charged with enforcing the Act) will be forced to discontinue all inspections of licensed dealers, research facilities, exhibitors and carriers. There will be no federal investigations of complaints or alleged violations, and cooperative efforts with other government agencies will cease.

It is no exaggeration to say that these developments will be disastrous for animals. The Animal Welfare Act is the only federal law that offers protection to animals. Together with its accompanying regulations, this law provides minimum requirements for handling, care, treatment and transportation of animals, and it establishes mechanisms for licensing and inspection of many research and commercial animal facilities.

It is important to recognize the unique purview of the Animal Welfare Act. Although all states have anti-cruelty statutes, there is very little overlap with the federal anti-cruelty provisions. Only nine states have laws which touch on any of the protections of the federal act, and none of these provides for inspection of research facilities. No state statute allows public access to and inspection of laboratories; the Animal Welfare Act now does through its requirement for public representation on animal care committees. In short, citizens who trust that the humane care of animals is being safeguarded by their government depend on APHIS to enforce the Animal Welfare Act.

The Office of Management and Budget's zero-funding recommendation comes as no surprise. In fiscal years 1983 and 1984 they proposed a 70% reduction, and last year they first suggested termination of the program. Fortunately, Congress has in the past recognized the importance of the Animal Welfare Act and has rejected the cuts. It is imperative that Congress again look beyond OMB's shortsighted recommendation and allocate adequate funding for the Animal Welfare Act and its new amendment. An appropriation of $6,6~~0~~48,850 for fiscal year 1987 would allow for the following:

## Adequate Enforcement of the Animal Welfare Act

When the Animal Welfare Act is aggressively and regularly enforced, animals in zoos, circuses and roadside shows, in dealers' premises, at airports, or in the wholesale pet trade are guaranteed that their basic needs of food, water, shelter and sanitation will be met. Animals used in research and testing are similarly guaranteed basic care in the laboratory setting. In short, when the Animal Welfare Act is enforced through surveillance, routine inspections and follow-through, a higher compliance with the federal requirements for humane treatment of animals is the result.

## Prevention of Further Abuses

Regular inspection of facilities and vigorous enforcement of the Animal Welfare Act's provisions will help prevent, as well as correct, abuses. A vigilant enforcement arm can stop mistreatment of animals before suffering is compounded and can also prevent problems which may require costly litigation and hours of agency time later on.

## Establishment of Information Service at National Agricultural Library

The recently enacted amendment to the Animal Welfare Act provides for an information service at the National Agricultural Library. This is the service which will make available current information on non-animal alternatives and assist in preventing duplication of experiments. The start-up costs for this service are estimated to be approximately $750,000. In return, it is likely that milliions of dollars will be saved.

Although researchers try to avoid it, unintentional duplication of experiments does occur. All too frequently research projects are repeated needlessly and animal lives are wasted. The clearinghouse established through this information service will reduce the chance of duplication, will reduce the time and expense associated with animal research, and will save animal lives and minimize animal suffering.

Second, the information service will decrease research costs by making available information on such alternatives as in vitro methods and computer modeling.

Finally, funding APHIS to do its job properly will enhance public confidence in the government and in research institutions. As mentioned earlier, the public is increasingly interested in and supportive of animal protection issues. Demonstrations, calls for release of laboratory animals, and even break-ins and technically criminal activity to "rescue" laboratory animals have been most prevalent where APHIS enforcement has been weak or lacking. The heightened public concern for such issues as the inadequacy of inspections at the University of Pennsylvania's Head Injury Laboratory is one of the most recent indications of strong public concern for animal protection issues. That concern continues to grow.

While we are well aware of the problems caused by the enormous federal deficit, the relatively few dollars saved by OMB's proposed cuts will be far outweighed by an increase in animal suffering. The public's interest in animal welfare has been clearly demonstrated and the Congress must take heed by making sure that the only federal program protecting millions of animals is not eliminated through lack of funding. On behalf of the ASPCA's constituency nationwide, I would like to request that this Subcommittee recommend an appropriation of $6,698,850 for enforcement of the Animal Welfare Act, of which approximately $750,000 would be used to establish the Information Service at the National Agricultural Library. This relatively modest appropriation would reassure the American public that the humane treatment of animals is indeed a priority for our government.

Thank you.

## IOWA STATE UNIVERSITY

**STATEMENTS OF:**

**HON. CHARLES GRASSLEY, U.S. SENATOR FROM IOWA**
**LEE KOLMER, DEAN, COLLEGE OF AGRICULTURE**

Senator HARKIN. Next, the committee welcomes back again this year Dr. Lee Kolmer, dean of the College of Agriculture at the foremost agricultural school in the United States. I understand that you are accompanied by somebody who is very familiar to us, my esteemed colleague from the State of Iowa, a good friend, Senator Grassley. Senator Grassley is no stranger to us here.

I would like to call upon Senator Grassley for the purpose of introducing our witness.

Senator GRASSLEY. Thank you, Senator Harkin and Senator Cochran. I appreciate very much the opportunity to introduce to the committee, Dr. Lee Kolmer. He is dean of Iowa State University's College of Agriculture.

As it is well-known, Iowa State University's College of Agriculture is one of the finest in the Nation. The college has made significant contributions not only in educating and training our Nation's young people in farming and agribusiness, but also in developing U.S. agriculture, making it second to none.

Much of the success of this college can be attributed to the leadership of the gentleman at my right, Dean Kolmer of Iowa State University. I urge my colleagues to give careful consideration to Dean Kolmer's recommendations as to how the establishment of a National Center for Food and Industrial Agriculture Produce Development can enhance and, in fact, expand farm markets, thus improving the economy for our struggling farmers, who, ironically, have fallen victim to their own productivity.

Improving farm income must come through the expansion of both domestic and foreign markets and expanding the uses of our farm products, as well as developing new crops for consumption and utilization, which is essential for the future of our agricultural economy. I strongly support Dean Kolmer's request and urge my colleagues of the committee to do likewise.

Also, without taking any more time from the committee, I do have one page that I would like to submit as part of my testimony on what you would expect me to, Senator Cochran, the soil tilth laboratory, and I'd like to submit for the record, if I could, a letter from Richard Lyng, in which he was suggesting that the administration had no objection to its inclusion in the urgent supplemental. Now, I don't think that's news to either one of you, but I at least would like to put in a plug for that at the time of my appearance here with Dean Kolmer. I would also like to ask Dean Kolmer to understand that I'm in markup on the tax bill, and I won't be able to stay here to hear your testimony, but I will read it later on.

[The statement and letter follow:]

### STATEMENT OF SENATOR GRASSLEY

I would like to take this opportunity to raise an important point which involves something of keen interest to the State of Iowa, Iowa State University, and the entire Iowa congressional delegation. Moreover, it is of significant importance to the Nation as a whole.

It should come as no surprise that I am referring to the National Soil Tilth Center that is to be established at Iowa State University. Unfortunately, funds that had been approved by this committee for that important project were shifted for other uses. If these funds are not restored immediately, construction will be delayed unnecessarily for months.

I would like to submit for the record a letter that I recently received from Agriculture Secretary Lyng. Whereas the administration had previously taken the position that funds for the Soil Tilth Center should be restored only in fiscal year 1987, Secretary Lyng states that the administration now holds no objection to including this $11.1 million in the fiscal year 1986 "Urgent Supplemental" if an appropriate offset is secured.

With this new support for immediate restoration, I urge my colleagues on the committee to take the necessary action to return these funds for this very important project.

Thank you for your consideration of my concerns, and thank you for the opportunity to introduce Dean Kolmer.

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### LETTER FROM RICHARD E. LYNG, SECRETARY OF AGRICULTURE

APRIL 23, 1986.

Hon. CHARLES E. GRASSLEY,
*U.S. Senate,*
*Washington, DC.*

DEAR SENATOR GRASSLEY: In your recent letter to me, you urged the administration to restore funding for a soil tilth laboratory at Iowa State University and to provide an offset to the $11.1 million for lab construction by deferring a like amount of rural housing loans. As you know, the funds originally appropriated for construction of a soil tilth laboratory at Iowa State University were recently used, under existing authorities, to deal with a very serious citrus canker situation. We believed it was more urgent to deal with our obligations under the citrus canker emergency than to construct this new laboratory.

We have reviewed your suggestion with the appropriate authorities within the administration. We are advised that the administration would not object if these arrangements were to be included in the pending urgent supplemental appropriations bill. This would involve inclusion in that bill of language limiting housing loan obligations in fiscal year 1986 to $1,410.5 million. This figure includes the housing reductions already recommended by the administration plus a further reduction of $11.1 million to offset the cost of restoring funding for the soil tilth laboratory.

It would then be possible to also include in the bill an appropriation of $11.1 million to restore funding for the soil tilth laboratory. The previous funds transferred for citrus canker have been committed for that purpose and are no longer available. Therefore, a new appropriation for the laboratory would appear to be the best solution.

A similar letter is being sent to Senator Dole.

Sincerely,

RICHARD E. LYNG, *Secretary.*

### COMMENTS OF SENATOR COCHRAN

Senator COCHRAN. Mr. Chairman, may I, at this point, simply thank Senator Grassley for taking time away from the important work of his Committee on Finance to come present Dean Kolmer to the committee and to let us have the benefit of his suggestions about the center that is being proposed there at Iowa State University and also the soil tilth laboratory. I know that he has spent a good deal of time discussing this with me—and, I assume, with others in the administration and here in the Congress—explaining the importance of the center to the State of Iowa, and I fully understand it now, I think.

I hope that we have funds available within the constraints of the Gramm-Rudman-Hollings law and the budget resolution to deal with projects that are as important as the soil tilth laboratory and the food center, which will be described by Dean Kolmer.

I do express personally my appreciation to you, Senator Grassley, for your efforts in this enterprise and in these activities, and we thank you for being here.

Senator GRASSLEY. We have discussed it so much that we have abbreviated it to the silth laboratory.

Senator HARKIN. I, too, want to thank my friend and colleague from Iowa for taking time. I know you are very busy in the markup on the tax bill, and I think it is a mark of your esteem for Dean Kolmer that you would take the time to be here, and we're most appreciative of that.

With that, we will just turn to Dr. Kolmer. Please proceed.

### AGRICULTURAL PRODUCTS FOR FOOD AND INDUSTRY

Dr. KOLMER. Thank you, Senator Cochran and Senator Harkin. I want to thank you for the opportunity to appear here to testify for what, I think, is a realistic way to address some of the severe economic difficulties in major sectors of U.S. agriculture.

As Senator Grassley stated, I am dean of the College of Agriculture at Iowa State. I speak as the representative of Iowa State University scientists and as a representative of the college.

I am challenged and I challenge you to do justice to a plan for substantial economic growth in major agricultural areas of the Nation. This Nation must recapture export markets. It must also broaden all markets for farm products, both food and industrial markets. It must expand its employment base in the agricultural areas.

To accomplish these goals and achieve widespread benefit throughout the economy, we must do a better job of turning raw agricultural commodities into food and industrial products for domestic and foreign markets.

We propose the establishment of a national research and development center specializing in agricultural products for food and industry. In such a center, we will bring scientists from disciplines throughout the university into research teams that can address one of agriculture's most urgent needs.

The center would have three areas of focus. One focus will be crop and animal modification. Here we will combine the best traditional breeding research with the newest tools of biotechnology. We will modify existing crops and develop alternative crops for farm production. These will be the sources of valuable new products for food and industry.

A second focus will be product and process development. In this area, multidisciplinary teams will develop better processing systems and competitive food and industrial products that aren't on the market today.

New preservation techniques, for example, can open the doors to remote markets where we cannot sell perishable products at present. Biodegradable plant materials have the potential to replace fibers, films and other plastics now produced from petroleum.

A third focus will be on systems development. It will encompass all the factors that must mesh in each successful new enterprise: appropriate markets, satisfied buyers, and profitable growers, processors, and distributors.

For the fastest possible progress, the efforts I have just described should be coordinated at one location where teams of scientists can focus on well-defined objectives.

Iowa is the right location for these efforts. The State has been hit particularly hard by the farm depression. One response at Iowa State University has been to shift resources and emphasize research on adding value to agricultural commodities. The payoff began quickly because strong existing programs provided a launching point for these efforts.

Our meat laboratory became the foundation for the Meat Export Research Center. In 2 years, the center has produced innovative processing techniques, new meat products, new markets for meat products, and a computer model of the Japanese livestock and meat sectors.

Another strong foundation is our team of crop and animal breeders. They are pacesetters in genetic improvement throughout the world. Their expertise is as valuable to agri-products development as it is to farm production. A national center would increase their opportunities to work with biotechnologists, food technologists, and other specialists in developing raw materials to meet emerging requirements for food and industrial products.

Our history of enthusiasm for interdisciplinary research is another strength. When the Iowa Legislature established the Food and Industrial Crops Processing Center, interdisciplinary teams formed even before facilities were available. This center and the Meat Export Research Center represent two substantial Iowa investments in research on agri-product development. It will be at the hub of activity in the proposed national center.

Also crucial to the proposed center is expertise in market studies and trade policy analysis. Again, we have that expertise in our Center for Agriculture and Rural Development and in the Food and Agricultural Policy Research Institute.

## FEDERAL SUPPORT NEEDED

The groundwork is in place, thanks to the support of Iowa taxpayers and producers. The missing element is a modest amount of Federal support. We know, as you mentioned earlier, Senator Cochran, that the

Federal budget is severely strained and each allocation of resources must be scrutinized carefully. We are confident that this proposal stands strong under rigorous examination.

An initial investment of $10 million by the Federal Government will set the National Center for Food and Industrial Agricultural Product Development in motion. It will mark the beginning of a focused national effort that will attract partners from State government, manufacturers, processors, and the farm and commodity organizations.

The need is great and the cost is really quite modest. The payoff will be regained strength in agriculture, thanks to a productive partnership between public and private interests. We will not retain our leadership in agriculture throughout the world unless we retain our leadership in technology. It is time we invest in that future.

Thank you for hearing me.

Senator HARKIN. Dr. Kolmer, thank you very much for your testimony. I just have three questions.

Basically, I would like to know what are the specific capabilities that Iowa State has that makes locating such a facility at Iowa State logical?

Dr. KOLMER. One is the capability we have in the meat area, with the scientists, the muscle biology group, and our meat laboratory and Meat Export Research Center, and one of the finest meat laboratory facilities that exist anywhere in this Nation or the world. It has demonstrated its value and its capability.

Another is the cadre of plant and animal breeders that are working cooperatively with the ARS in the plant breeding area and are recognized as being very excellent breeders for both plants and animals. They are necessary if we are going to continue to modify plants to speed up that process so that we more specifically meet market needs.

Another is the capability we have of moving the chemical engineering people with the teams of food technologists, animal scientists, and plant scientists, to create a food engineering, a process development effort that we can do very quickly and easily.

## PREVIOUS ACCOMPLISHMENTS

Senator HARKIN. Is there some track record up to now at Iowa State?

Dr. KOLMER. In the very short time since the legislature created these two institutes—the last 2 years—one thing that was developed at our Meat Export Research Center was round bacon. It took thin bellies and formed them into a round package with a shrink wrapper. They slice them 16 to the pound and they sell round bacon on McDonald's hamburgers. It adds 3 cents to a pound to thin bellies which were heavily discounted previously in the marketplace.

Another is the beef ham for the Middle Eastern market, where pork is not consumed. We have been working with people in the Middle East and have developed a beef product that has some of the characteristics of ham in terms of preservation, flavors, and so forth, that fits a nitch in the market. The idea is getting some market nitches.

The model that the Food and Agricultural Policy Research Institute developed of the Japanese meat market, I think, will be very valuable as negotiations continue with them in terms of market access.

Our plant breeders and food technologists working together have developed a soybean that produces a solid oil. That means hydrogenation is not required in some markets around the world where they prohibit hydrogenation. This improves our market access for the soybean oil produced in this country.

These are some examples of what we have been doing.

Senator HARKIN. Last, are the producers supporting this proposal and are they making any pledges of assistance?

Dr. KOLMER. Yes, sir; they have. In the past 2 years, the farm producers, the corn producers, the soybean producers, the pork producers, the beef producers—they have all not just made pledges, they have contributed money. In total, between producers' contributions, which are somewhere around $200,000, I believe, industry contributions have totaled over $700,000 for this idea. It is well received at both the State and national levels. The National Pork Producers, for example, made a contribution to help get us started.

Senator HARKIN. Very good. Thank you.

Senator COCHRAN. Dean Kolmer, let me just add my welcome to the committee. It is good to see you again. I remember our first meeting out in your State, which was a pleasant experience for me. I have a great deal of respect for you and your colleagues there at Iowa State University and the fine work you do.

There is no way we can make a commitment to you one way or the other this morning about either the laboratory that Senator Grassley has been discussing with us or the research center for food and industrial product development. We will give it very careful consideration and every possible effort will be made to cooperate with you in the efforts you are making at Iowa State, within the constraints that we face in the budget.

Thank you for taking the time to present us with your testimony and adding to our hearing.

Dr. KOLMER. Thank you, Senator Cochran.

Senator HARKIN. Dr. Kolmer, I just want to join my colleagues and especially my friend and colleague, Chuck Grassley, in welcoming you here and again thanking you for your many years of service to Iowa and Iowa State University as dean of agriculture.

How many years has it been, a dozen?

Dr. KOLMER. The 14th one. One of the longest terms of office has just ended, and that is Louis Wise of Mississippi State. He retired a week ago tomorrow, I believe. With good reasons, Senator, his colleagues refer to him as Louis the Wise.

Senator COCHRAN. He is a great fellow. We will miss him at Mississippi State University. He will be around. I don't think he will drop out of the action.

Dr. KOLMER. You will miss him in Mississippi. All of us across the country as deans will miss him also.

Senator COCHRAN. I will pass along your comments to him. I know he will appreciate that. Thank you.

Senator HARKIN. Dr. Kolmer, thanks again.

[The statement of Dr. Kolmer follows:]

## STATEMENT OF LEE KOLMER

### Summary of Request

Iowa State University is requesting that the Subcommittee fund the establishment of a National Center for Food and Industrial Agricultural Product Development. The FY 1987 request is $10 million.

Good afternoon. Thank you for this opportunity to testify about a realistic way to address the severe economic difficulties in major U.S. agriculture. I'm Lee Kolmer, Dean of Iowa State University's College of Agriculture. I speak as a representative of Iowa State and its agricultural scientists. I am challenged and I challenge you to do justice to a plan for substantial economic growth in major agricultural areas of the nation.

This nation must recapture export markets. It must broaden all markets for farn products, and it must expand the employment base in its agricultural areas.

To accomplish these goals and achieve widespread benefit throughout the economy, we must do a better job of turning raw agricultural commodities into food and industrial products for domestic and foreign markets. We propose the establishment of a national research and development center specializing in agricultural products for food and industry. In such a center, we will bring scientists from disciplines throughout the University into research teams that can address one of agriculture's most urgent needs.

The center will have three areas of focus:

One focus will be crop and animal modification. Here we will combine the best of traditional breeding research with the newest tools of biotechnology. We will modify existing crops and develop alternative crops for farm production. These will be the sources of valuable new products for food and industry.

A second focus will be product and process development. In this area, multidisciplinary teams will develop better processing systems and competitive new food and industrial products.

New preservation techniques, for example, can open the doors to remote markets where we cannot sell perishable products at present. And biodegradable plant materials have the potential to replace fibers, films and other plastics now produced from petroleum.

A third focus will be systems development. It will encompass all the factors that must mesh in each successful new enterprise--that is appropriate markets; satisfied buyers; and profitable growers, processors and distributors.

For the fastest possible progress, the efforts I have just described should be coordinated at one location where teams of scientists can focus on well-defined objectives.

Iowa is the right location for these efforts. The state has been hit particularly hard by the farm depression. One response at Iowa State University has been to shift resources and emphasize research on adding value to agricultural commodities. The payoff began quickly because strong existing programs provided a launching point for new efforts.

ISU's Meat Laboratory became the foundation for the Meat Export Research Center. In two years, the Center has produced innovative processing techniques, new meat products, new markets for meat products and a computer model of the Japanese livestock and meat sectors.

Another strong foundation is our team of crop and animal breeders. They are pacesetters in genetic improvement. Their expertise is as valuable to agri-products development as it is to farm production. A national center would increase their opportunities to work with biotechnologists, food technologists and other specialists in developing raw materials to meet emerging requirements for food and industrial products.

Our history of enthusiasm for interdisciplinary research is another ISU strength. When the Iowa Legislature established the Food and Industrial Crops Processing Center, interdisciplinary teams formed even before facilities were available. This Center and the Meat Export Research Center represent two substantial Iowa investments in research on agri-product development. The centers will be at the hub of activity in the proposed national center.

Also crucial to the proposed Center is expertise in market studies and trade policy analysis. Again, ISU has that expertise in its Center for Agriculture and Rural Development and the Food and Agricultural Policy Research Institute.

The groundwork is in place, thanks to the support of Iowa taxpayers and producers. The missing element is a modest amount of federal support.

We know that the federal budget is severely strained, and each allocation of resources must be scrutinized carefully. We are confident that this proposal stands strong under rigorous examination.

An initial investment of $10 million by the federal government will set the National Center for Food and Industrial Agricultural Product Development in motion. It will mark the beginning of a focused national effort that will attract partners from state government, manufacturers and processors, and farm and commodity organizations.

The need is great. The cost is modest. The payoff will be regained strength in agriculture, thanks to a productive partnership between public and private interests. The future of U.S. agriculture depends on its technological leadership in the world. It is time to invest in that future.

## SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

### STATEMENT OF CHRISTINE STEVENS, SECRETARY

Senator HARKIN. Next we will call Ms. Christine Stevens, of the Society for Animal Protective Legislation. Ms. Stevens is certainly no stranger to this subcommittee and to this Senator, who considers her a personal friend and one who is always in the forefront of protective legislation for animals. We welcome you again to the subcommittee, Ms. Stevens.

Senator COCHRAN. May I also add my welcome to Ms. Stevens. I had previously agreed to meet with a group of friends from my home State who are coming up here at 11 o'clock, but I have delayed that meeting so that I could be here to welcome you and thank you for the assistance you have provided to us as we try to do the right thing with animal welfare. I know of your strong interest in this subject.

Ms. Stevens has taken advantage of opportunities to discuss this interest with me. I have appreciated that and enjoyed having the benefit of those discussions with her, at the Kennedy Center and in other places. It is always good to see you. Welcome to the committee.

Ms. STEVENS. Thank you very much, Senator Cochran and Senator Harkin, and I really appreciate those kind words, because I know in this year, we need real friends to help get the Animal Welfare Act well enforced.

What we are asking for, in conjunction with all the major scientific groups and all the major humane societies, is a very small increase to make it really possible to do all the inspections that are required and to establish an information service at the National Agricultural Library in conjunction with the National Library of Medicine, which will save the Government money over the years. The amount is only $750,000 for this fiscal year 1987.

In the material that is attached to my testimony, you may have noticed a xerox of a few pages from Trends in Bioassay Methodology in which it is actually estimated that billions of dollars can be saved if duplicative testing by Government agencies is ended. And that is what the two libraries together could accomplish.

I am glad to say I just had a very encouraging talk with the people at the National Library of Medicine also, who are cooperating with the National Agricultural Library already. In fact, Mr. Howard, the head of that library is a regent of the National Library of Medicine, so there is a natural coalition, as it were, and no difficulties between two agencies which unfortunately sometimes occur.

So I can only put it forward as strongly as I possibly can that this strong increase be included in order to save a great deal of Government money and to save unnecessary animal pain and suffering, which I know you wish to do.

The amount, though, of $4.865 million, which has been the total appropriated in the past years to enforce the Animal Welfare Act should be increased to what it actually cost in 1985, and that is attached also. That comes from USDA, and shows the breakdown of how they spent it, once they had been criticized by the GAO report and it was drawn to their attention that there were very serious lacks in two major laboratory States. They only got around to half of the laboratories, even once during the course of the year.

So obviously, that is not going to do the job that the American public wants, that the Senate has shown it wanted by unanimously adopting the Improved Standards for Laboratory Animals Act late last year. I know you are both busy, so I do not want to say another word, but just beg you to appropriate this $6,648,850.

Senator COCHRAN. Ms. Stevens, you are a very persuasive witness, and I cannot think of anyone who could do a better job for this issue or this area of concern than you are doing. I know you have spent an awful lot of time and effort, personally, and I appreciate that and am impressed by it.

You have my personal assurance that I will give very careful consideration to your request and your suggestions, and I hope that you and those who have joined you in this effort—a very impressive list—will be satisfied with the actions of the committee.

Ms. STEVENS. Well, I certainly hope so, and I know you are going to hear from Frankie Trull, who can tell you more about the scientific community's views on this, in which we are in agreement 100 percent—well, we coincide.

Thank you.

Senator HARKIN. Ms. Stevens, thank you again very much.

[The statement of Ms. Stevens follows:]

## STATEMENT OF CHRISTINE STEVENS

On behalf of the Society for Animal Protective Legislation, I respectfully request that an appropriation of $6,648,850 be made for FY 1987 for enforcement of the Animal Welfare Act. This figure comprises the cost of enforcing the Act in 1985 plus $750,000 to provide an information service at the National Agricultural Library, as provided in the Improved Standards for Laboratory Animals amendments unanimously adopted by the House of Representatives and Senate as a part of the Farm Bill.

Attached is a breakdown provided by The Animal and Plant Health Inspection Services of funds expended in FY 1985 to carry out the provisions of the Act. (1) Investigation of complaints and alleged violations, registering and inspection of research facilities, licensing and inspection of animal dealers, exhibitors, carriers and intermediate handlers, administration, including regional animal care specialists and staff and regulatory compliance staff, make up the total, together with $266,284 for training.

The 1,219 registered research facilities with 2,399 sites were visited an average of 2.7 times in 1985; premises of the 3414 licensed dealers were visited an average of 2.4 times. The 1386 exhibitors were inspected an average of 2.3 times, the 248 intermediate handlers were inspected an average of 1.7 times in 1985. In addition, 4027 inspections were made at airports. It is clear that APHIS' Veterinary Services is doing a massive and highly demanding job on a tight budget. To carry out the expressed will of Congress for assuming greater responsibility in accordance with the amendments to the Animal Welfare Act due to take effect December 23rd of this year, a sum at least equal to this needs to be appropriated.

The additional $750,000 for the mandated information service at the National Agricultural Library will bring about savings in government expenditures far greater than its cost. To quote the new amendments:

> (e) The Secretary shall establish an information service at the National Agricultural Library. Such service shall, in cooperation with the National Library of Medicine, provide information--
>
> > (1) pertinent to employee training;
> >
> > (2) which could prevent unintended duplication of animal experimentation as determined by the needs of the research facility; and
> >
> > (3) on improved methods of animal experimentation, including methods which could--
> >
> > > (A) reduce or replace animal use; and
> > >
> > > (B) minimize pain and distress to animals, such as anesthetic and analgesic procedures.

Duplication of testing by different government agencies has been estimated to be costing the taxpayer billions of dollars. (2) Reduction in this economic waste and abuse of animals is essential.

The information service is designed to prevent animal suffering and save government money by making alternatives to laboratory animals more readily available (alternatives are generally less expensive than animal experiments, and in most cases test results using alternatives are more rapidly achieved) and by preventing unintended duplication of animal experiments.

Providing information for employee training will enable institutions to conduct such training efficiently, thereby advancing the dual goals of preventing animal suffering and preventing waste of tax funds, which has occurred when neglected animals sicken and die. The modest investment in the information service is capable of saving government funds vastly greater than the cost of the service. This provision of the Improved Standards for Laboratory Animals amendments combines humane treatment of animals with cost effectiveness of a very high order.

The scientific community and animal protective organizations strongly urge this distinguished Subcommittee to recommend $6,698,850 for Fiscal Year 1987. In a letter dated April 2, 1986, 98 groups joined in calling for this appropriation. A copy of the letter, addressed to Chairman Cochran, is attached for your convenience in referring to the wide span represented. (3) Nor does this list of signatories represent every organization which supports this appropriation. Additional groups did not make the deadline for submission of the letter.

This remarkable outpouring of support for adequate funding to ensure that the Animal Welfare Act is enforced demonstrates the great significance of this law to those most directly affected by or concerned with it and to the American public at large. We respectfully request that this appropriation be made.

## Horse Protection Act

The Horse Protection Act has slowly reduced the cruel and painful soring of Tennessee Walking Horses in accordance with laws passed by Congress for that purpose in 1970 and 1976. We request that $331,084 be appropriated to enforce the law. This is the amount spent by USDA in FY 1985.

## References

(1) Cost of Animal Welfare Accomplishments FY 1985 (U.S. Department of Agriculture)

(2) Trends in Bioassay Methodology (pp 132 - 133) National Institutes of Health, 1981

(3) Letter from 98 scientific and animal protective groups to Chairman Cochran

[ATTACHMENT 1]

## Cost of Animal Welfare Accomplishments
## FY 1985

| Field Work Unit | Dollars Spent |
|---|---|
| Licensing Dealers´ Premises | $ 203,007 |
| Inspection of Licensed Dealers | 935,949 |
| Reinspecton of Licensed Dealers | 187,189 |
| Registering Research Facilities | 29,880 |
| Inspect Research Facility Sites | 657,802 |
| Reinspect Research Facility Sites | 101,064 |
| Licensing Exhibitors Premises | 28,561 |
| Inspection of Exhibitors | 423,593 |
| Reinspection of Exhibitors | 71,184 |
| Auction Markets/Sales Monitored | 23,288 |
| Register Carrier/Intermediate Handlers | 1,757 |
| Inspection of Carrier Sites | 181,478 |
| Inspection of Intermediate Handlers Sites | 34,712 |
| Searches for Illegal AWA Activity | 126,551 |
| Investigate Complaints | 164,340 |
| Investigate Alleged Violations | 548,826 |
| Submission of Alleged Violations | 201,689 |
| Prosecution Support (Court Witness Hearings) | 6,590 |
| Request for Additional Information (Violations) | 58,881 |
| Attempted Inspection (No One Home) | 141,490 |
| Training | 266,284 |
| Subtotal | $ 4,394,115 |
| Regional Animal Care Specialists | 337,339 |
| Regional Offices Charges | 281,325 |
| Subtotal | $ 5,012,779 |
| **Headquarters Unit** | |
| Animal Care Staff | 489,991 |
| Regulatory Compliance Staff Charges | 220,068 |
| Deputy Administrator Charges | 176,012 |
| TOTAL | $ 5,898,850 |

## [ATTACHMENT 2]

## EXCERPT FROM TRENDS IN BIOASSAY METHODOLOGY

had experiments in this country on prisoners and on people who were mentally retarded. We also had experiments on our neighbors south of the border who could not defend themselves.

When we eliminated those practices, we did not eliminate them because we had alternatives. Indeed, we have to this day no other alternatives to the human experiments which were conducted. They were eliminated because there was widespread revolution against that kind of experimentation. We are going to continue experimenting on animals until there is widespread revolution in this country against this sort of practice.

I think that those of us who feel that the practice should be terminated should concentrate on arousing that revolution, not on suggesting alternatives. The alternatives will be developed by the very able scientists who are engaged in this kind of work.

MS. FREE: My name is Ann Free, Albert Schweitzer Fellowship, and the Society for the Study of Ethics in Animals. In a few minutes, the President will be speaking on economics and we, of course, are interested in ethics and efficacy. But I believe that we've learned a great lesson today, particularly from Dr. Morgenroth, to whom I am going to address my question, if that is permissible.

He has pointed out that the IRLG has been concerned with two steps in the "three R's"--reduction and refinement. I wonder if Dr. Morgenroth could give us an educated guess on what the dollar saving, as well as the savings in animal life and, consequently, suffering will be when his interagency program really gets under way.

The second part of the question is: doesn't he think, therefore, that when it gets under way and it's shown that we can get over the antediluvian practices of the past, that we can then go forward to the third "R"--replacement?

DR. MORGENROTH: That's a difficult set of questions. One of the first things we did as a committee was to try to identify duplicative testing where the same tests would not satisfy multiagency requirements. We don't have any real figures as to total dollars that have been spent prior to having the unified testing procedure that the five regulatory agencies would accept. We could make some guesses about it.

I'm aware of one compound that was regulated by three different groups that had duplicative testing based on different agency requirements. I don't know how frequently this kind of phenomenon occurs.

The cost of an animal study, a bioassay, runs almost half a million dollars. A Draize test using the six-animal model costs about $15,000 to $18,000. Bob Osterberg, do you have any feelings, from all the things we reviewed, over the years? Would the total savings be a billion dollars?

MS. FREE: Someone told me earlier, billions of dollars and millions of animals.

DR. MORGENROTH: I think that's possible.

DR. OSTERBERG: I agree with you, Vic. I don't think we have enough information to provide accurate answers. But, conceive of the fact that, of the five-member regulatory agencies that constitute IRLG, three have regulations that require some type of testing--either for premarket clearance or, like CPSC, for regulation of a chemical already on the market. If one agency's data will satisfy the other two, you've cut testing by two-thirds, and reduced your costs likewise.

DR. MORGENROTH: I think that savings could, in fact, be quite dramatic in the future, especially as the Toxic Substances Control Act, the supra-pesticide reregistration, and food additives cyclic reviews come into play. There's enormous economic impact in those programs.

If a single test, done with a given procedure, would satisfy all of the agencies' requirements, there would be significant savings. It may reach billions of dollars. The only way to estimate it would be to make the supposition that all three agencies have different requirements.

In terms of the third "R," our committee, along with international organizations, is looking at the applicability of in vitro tests as initial screens to prioritize compounds. Right now, there is no in vitro substitute for currently available animal studies for regulatory purposes.

However, I think that some of the research being performed may lead to substitution in 20 years. It's important that people recognize that it's going to take time. As an interim measure, in vitro studies can be used to select agents of highest priority to the regulator for utilizing in vivo tests.

## NATIONAL ASSOCIATION FOR BIOMEDICAL RESEARCH

### STATEMENT OF FRANKIE L. TRULL, EXECUTIVE DIRECTOR

Senator COCHRAN [presiding]. Next is Ms. Frankie L. Trull, executive director of the National Association for Biomedical Research.

Welcome to the subcommittee. Your statement will be made a part of the record in its entirety. Please proceed as you desire.

Ms. TRULL. Thank you, Mr. Chairman.

I am Frankie Trull, executive director of the National Association for Biomedical Research, an organization dedicated solely to the scientific community's interest in the continued humane and responsible use of research animals to improve the health of people and animals.

NABR's institutional members have joined, as Ms. Stevens has just mentioned, with more than 100 other academic, scientific, animal welfare, and protection organizations in seeking adequate appropriations for effective enforcement of the Animal Welfare Act by the USDA/Animal and Plant Health Inspection Service.

We estimate that $6,648,850 is the minimum amount required for USDA/APHIS in fiscal year 1987 to carry out its mandated responsibilities under the act, as amended by Congress in December 1985.

I have attached a copy of the letter that we had sent to you, Mr. Chairman, along with the organizations that have signed on to that letter, which I hope can be submitted to the hearing record.

Senator COCHRAN. It will be.

[The letter follows:]

## LETTER FROM SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

The Honorable Thad Cochran
Chairman, Appropriations
Subcommittee on Agriculture, Rural
Development and Related Agencies
U.S. Senate
Washington, DC 20510

April 2, 1986

Dear Senator Cochran:

In the past you and the House Appropriations Committee have recognized the importance of continuing funding for the USDA Animal and Plant Health Inspection Service animal welfare program. As you know, animal protection organizations as well as the scientific community strongly support effective enforcement of the Animal Welfare Act. Your efforts to provide necessary resources to the agency charged with this responsibility are, therefore, very much appreciated.

In Fiscal Year 1985, the Department of Agriculture spent $5,898,850 to carry out its duties as prescribed by the Animal Welfare Act -- a comparatively modest sum in view of the significance of the national inspection program. Beyond the Department's current activities, in December 1985, Congress adopted amendments to the Act which require that a laboratory animal welfare information service be established at the National Agriculture Library in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to start the congressionally-mandated service in FY 87.

The undersigned organizations respectfully request that the Committee once again protect this essential inspection program and recommend appropriations of **$6,648,850 for FY 87** -- the minimum amount required to implement the Animal Welfare Act as recently amended. Your consideration will be most appreciated. Please contact Christine Stevens, Society for Animal Protective Legislation (202-337-2332), or Frankie Trull, National Association for Biomedical Research (202-857-0540), should you or your staff have questions or require additional information.

Sincerely,

American Academy of Otolaryngology Head and Neck Surgery
American Association for Thoracic Surgery
American Association of Chairman of Departments of Psychiatry
American Association of Directors of Psychiatric Residency Training
American College of Physicians
American Federation for Clinical Research
American Heart Association
American Humane Association
American Neurological Association
American Physiological Society
American Psychiatric Association
American Psychological Association
American Society of Hematology
American Society of Microbiology
American Society for the Prevention of Cruelty to Animals
American Veterinary Medical Association
Animal Care and Welfare/SPCA
Animal Protection Association
Animal Protection Association of America
Animal Protection Institute
Animal Rescue Foundation

Animal Rescue League
Animal Welfare League
Anna L. Haas Humane Society of Cobb County
Atlanta Humane Society
Association for Academic Psychiatry
Association for Academic Surgery
Association of Academic Departments of Otolaryngology
Association of American Medical Colleges
Association of American Universities
Association of Medical Schools Departments of Biochemistry
Association of Medical Schools Pediatric Department Chairmen, Inc.
Association of Orthopedic Chairmen
Association of Professors of Medicine
Association of University Anesthetists
Association of University Professors of Opthalmology
Association of University Radiologists
Bismarck Humane Society
Black Hawk Humane Society
Bonneville County Humane Society
Boone County Humane Society
Broome County Humane Society
Citizens for Animal Welfare Education
Corinth Alcorn Humane Society
Federation of American Societies for Experimental Biology
Federation of Behavioral, Psychological, and Cognitive Sciences
Federation of Humane Societies of Pennsylvania
Florida Federation of Humane Societies
Florida Humane Society
Forrest County Humane Society
Fund for Animals
Greenfield Area Animal Shelter
Gwinnett Humane Society
Halifax Humane Society of Volusia County
Humane Legislative Network
Humane Society for Animals
Humane Society in Tampa Bay
Humane Society of Bay County
Humane Society of Huron Valley
Humane Society of Seminole County, Inc.
Humane Society of the United States
Humane Society of Vero Beach
Humane Society of Warner Robins and Houston County
Iowa City Animal Shelter
Kentucky Humane Society
Lab Animal Magazine
Little Rock Department of Animal Control
Massachusetts Society for the Prevention of Cruelty to Animals
Michigan Federation of Humane Societies
Michigan Humane Society
Mississippi Animal Control and Protection Society
Mississippi Animal League
Missouri League for Humane Progress
Muscogee County Humane Society
Nashville Humane Society
National Alliance for Animal Legislation
National Association for Biomedical Research
National Association of State Universities and Land Grant Colleges
Oklahoma City Animal Control
Orlando Humane Society
Panhandle Animal Welfare Society
Panhandle Humane Society
Pharmaceutical Manufacturers Association
Progressive Animal Welfare Society
Pulaski County Humane Society
St. Charles Humane Society
Society for Animal Protective Legislation
Society for Neuroscience
Society of Academic Anesthesia Chairmen, Inc.
Society of Critical Care Medicine
Society of University Otolaryngologists
South Dakota Animal Welfare League
Stray Haven Animal Shelter
Surgical Infection Society
Tennessee Humane Association
Tippecanoe County Humane Society
University Association for Emergency Medicine
Webster County Humane Society
Western Pennsylvania Humane Society
Wisconsin Humane Society

## PRIOR CONGRESSIONAL SUPPORT

Ms. TRULL. In the past, this subcommittee has recognized the importance of a national animal welfare inspection program. NABR members appreciate your leadership and hope you will again act to continue adequate funding for this critical program.

Congress, as a whole, reaffirmed the importance with which it holds a strong, consistent Federal laboratory animal welfare program when it approved amendments to the Animal Welfare Act just 4 months ago. The amendments, which become effective in December 1986, significantly expand the act and USDA's role in its enforcement.

For example, the statute now explicitly states that the Secretary of Agriculture shall inspect each research facility at least once a year. Prior to the 1985 amendments, Federal inspections were left to the Secretary's discretion. In view of Congress' clear, recent statement, as well as the repeated actions of appropriations committees, it is incomprehensible that the administration would suggest, yet again, the elimination of the animal welfare inspection program.

Research facilities are all too aware that Federal budget restraints have never been greater. But zeroing out this modest expenditure would be false economy. The USDA/APHIS animal welfare budget is so small that eliminating it would have a negligible impact on the Federal deficit. However, the effect on biomedical and behavioral research could be enormous.

Research institutions are themselves investing considerable resources to comply with the Animal Welfare Act as amended. NABR is just beginning to collect hard data and does not yet have complete statistics, but early survey returns suggest that the overall cost to research facilities for operation of institutional animal committees, increased responsibilities of animal care personnel, new annual reporting, recordkeeping, and employee training—all now required by law—will easily be three to four times the cost of the Federal inspection program.

The scientific community is shouldering the major share of the expense of implementing uniform national standards for the care and use of laboratory animals. We are relying on the Federal Government's continued participation by conducting a high quality inspection effort to assure these standards are met. Such assurance has been mandated by law and is expected by the general public.

## PUBLIC CONCERN FOR ANIMALS USED IN RESEARCH

National public opinion polls conducted for the Foundation for Biomedical Research indicate that the vast majority of Americans support the use of animals in research and safety testing. At the same time, the public is very concerned that animals which must be used are treated humanely. The Animal Welfare Act was put in place 20 years ago to address this concern. In creating the act and with its periodic amendments, Congress has continually recognized the essential Federal role in maintaining public confidence in research.

It is impractical, if not impossible, for each State to duplicate this effort, as suggested by the administration. Moreover, it would certainly be more costly.

Inadequate funding of the APHIS inspection program could seriously impede research and, ultimately, jeopardize the future health and well-being of the Nation. If faith and trust in the current enforcement program is lost, there will be increasing pressure to curtail or possibly eliminate the use of animal models in biomedical research and testing.

The scientific community and animal protection organizations do not always agree on how to balance animal welfare concerns and research needs without compromising either. We do agree that effective enforcement of the Animal Welfare Act is a critical element in achieving this goal.

NABR, therefore, urges your support of fiscal year 1987 appropriations for the animal welfare inspection program of $6,648,000 dollars, the minimum amount necessary for enforcement of the Animal Welfare Act.

Thank you, Mr. Chairman, for the opportunity to appear before the committee.

Senator HARKIN [presiding]. Thank you very much, Ms. Trull.

I assume that you are also supporting the $750,000 for the mandated information services at the National Agricultural Library?

Ms. TRULL. That is included in the $6.6 million.

Senator HARKIN. You are saying that you want that included in there?

Ms. TRULL. Yes.

Senator HARKIN. OK, thank you very much for your testimony. We appreciate it.

Our next witness will be Mr. Robert O. Baker, field investigator, Department of Investigations, the Humane Society of the United States.

Mr. Baker apparently is not here.

## INTER-SOCIETY COUNCIL FOR BIOLOGY AND MEDICINE

### STATEMENT OF ALFRED E. HARPER, PH.D., PROFESSOR, DEPARTMENT OF BIOCHEMISTRY, UNIVERSITY OF WISCONSIN, AND PRESIDENT, FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY, ON BEHALF OF THE INTER-SOCIETY COUNCIL FOR BIOLOGY AND MEDICINE

Senator HARKIN. We will turn to Dr. Alfred Harper, professor, Department of Biochemistry at the University of Wisconsin, representing the Inter-Society Council for Biology and Medicine.

Dr. Harper, welcome to the subcommittee.

Dr. HARPER. Thank you very much, Mr. Chairman and members of the subcommittee.

I appreciate the opportunity to appear before you this morning. I am Alfred E. Harper, professor in the Departments of Biochemistry and Nutritional Sciences at the University of Wisconsin in Madison, president of the Federation of American Societies for Experimental Biology, and I am appearing before you, as the chairman mentioned, on behalf of the Inter-Society Council for Biology and Medicine, a coalition of scientific and medical organizations.

Collectively, we represent working scientists drawn from all of the important research, educational, and clinical centers in the United States. Our organizations are devoted to conducting responsible research with the goal of preventing and curing sickness and disease in human beings and in animals.

To reach this goal, we are devoted to the highest standards of scientific and ethical responsibility in all research involving the use of animals. We adhere to these high standards because of our respect for living things and because research involving the use of animals, to be valid, must be done carefully, humanely, and be consistent with Federal law.

The Federal agency charged with enforcing the Animal Welfare Act is the Animal and Plant Health Inspection Service [APHIS]. We in the scientific community strongly support the work of APHIS, and we regret the administration's efforts to terminate the APHIS animal welfare program and, instead, we recommend that Congress provide $6.648 million for this program in fiscal year 1987.

In fiscal year 1985, the last year for which complete information is available, the Department of Agriculture spent $5.8 million to carry out its duties as prescribed by the Animal Welfare Act. In fiscal year 1986, it is currently expected that only $4.6 million will be spent on this program, a drop of $1.2 million from the previous year.

### NAL INFORMATION SERVICE

Our recommendation would bring real spending back to the fiscal year 1985 level and add $750,000 to develop a Laboratory Animal Welfare Information Service at the National Agricultural Library.

Congress mandated this information service when it amended the Animal Welfare Act this past December. The amended Animal Welfare Act can be adequately enforced only if it receives sufficient funding.

As I am sure you are aware, Mr. Chairman, this is the fifth year in a row that the administration has recommended the termination of the APHIS animal welfare program. We are gratified that the subcommittee has rejected this approach in the past. The administration's justification for terminating funding for the APHIS animal welfare program is based on the assumption that these activities can best be carried out by States, industry groups, and individuals.

We contend that there is no State or local authority presently capable of replacing the APHIS animal welfare program. If the APHIS program were eliminated, there would be no mechanism by which Federal agencies could be assured that their grantees were complying with Federal law and regulations.

Furthermore, the resulting maze of State and local regulation, if imposed, would hinder federally funded biomedical research and could impact adversely on efforts to improve the health of our citizens.

It is obvious that the Federal Government, which supports most of the biological and biomedical research in this country, has the overriding responsibility to ensure that standards for animal care are met by the researchers it supports.

Adequate funding for the APHIS animal welfare program is also needed to develop and maintain a group of well-qualified inspectors. Currently only a small minority of APHIS inspectors devote their full time to animal welfare activities. Given Congress' concern in this area, it is essential that we develop and maintain an adequate cadre of inspectors in order to increase the number of inspections.

In 1985, the General Accounting Office report noted that while an effective, fully funded animal inspection program would result in an average of four inspections per institution per year, many sites are not inspected at all. The GAO found that several regional offices did not have enough personnel to conduct an adequate number of inspections.

In conclusion, Mr. Chairman, we hope that you will note the letter supporting the APHIS animal welfare program submitted for the record that has been signed by scores of scientific, medical, and humane societies. We are all in agreement that it is clearly in the national interest to strengthen the animal welfare program. APHIS is the Federal agency best suited to administer the Animal Welfare Act. Effective administration of the law requires an increased appropriation for APHIS, and we recommend that $6.6 million be provided in fiscal year 1987.

Senator HARKIN. Dr. Harper, thank you for your testimony, and again I think it's interesting to note that both those who represent humane societies and animal protective organizations and those who represent the Federation of American Societies for Experimental Biology, the scientists who are doing the studies, agree on this.

Dr. HARPER. Correct.

Senator HARKIN. Thank you very much, doctor.

## HUMANE SOCIETY OF THE UNITED STATES

### STATEMENT OF ROBERT O. BAKER, FIELD INVESTIGATOR, DEPARTMENT OF INVESTIGATIONS

Senator HARKIN. Mr. Robert Baker, field investigator, Department of Investigations of the Humane Society of the United States.

Mr. Baker, welcome to the subcommittee. Your statement will be made a part of the record, and please proceed.

Mr. BAKER. Thank you, Senator.

Mr. Chairman, my name is Robert Baker. I'm a field investigator for the Humane Society of the United States, and I am here today representing the Humane Society of the United States, as well as our 400,000 members and constituents throughout the country. We're here to present our concerns about continued and adequate funding for enforcement of the Animal Welfare Act, which is administered by the Animal and Plant Health Inspection Service of USDA.

The Animal Welfare Act, as you know, was passed in 1966 and has been amended in the past 20 years to extend protection requiring adequate food, water, and housing to those animals kept in laboratories, zoos, circuses, commercial dogbreeding establishments, as well as those sold for research purposes.

Although millions of animals are affected under this act, the Office of Management and Budget has committed an unconscionable act in recommending that the APHIS budget for enforcement be eliminated. While the Humane Society of the United States has not always agreed with APHIS about the adequacy of enforcement, APHIS has been charged by Congress with vital inspections that no other arm of Government is allowed to do.

We have some very grave concerns about the elimination of the Animal Welfare Act Program, which would be a consequence of zero budgeting. Some of our concerns I will go over very briefly.

Number one would be laboratory animals. The original Animal Welfare Act was enacted for the protection of the millions of animals used in research. At a time when the Federal Government spends billions of dollars to fund biomedical research, it is an outrage that the same Government should eliminate the paltry sums budgeted for inspections of laboratory animals in these facilities. Since most State laws exempt research, teaching, and testing from their cruelty statutes, the Animal Welfare Act is the only viable way that we have of protecting these animals. I think a perfect example was in the State of Maryland in the Dr. Taub case. If you are familiar with that case, the State of Maryland did not want to take action because it was a Federal institution.

We have another concern, and that is for zoos and circuses. The Animal Welfare Act requires licensing and inspection of almost 1,100 facilities throughout this Nation, and we regularly encounter situations where even the most basic needs of the animals go unmet. In the most extreme cases, APHIS has had to intervene in instances where animals have been physically abused.

Another concern of ours and especially of concern to me are puppy mills or commercial dogbreeding establishments that mass-produce dogs for resale in pet shops. I personally have investigated over 350 of these establishments in the last 5 years, and the conditions in these facilities are abominable. There are dogs living in filth, in inadequate shelter, lack of adequate food and water. I saw places where excrement was piled 2 feet high in the cages with these animals. I have found animals that were frozen to death. I saw them being fed carcasses of other animals. In some cases—or in one instance, the dogs were starving, and the ones that had died were skinned and were being fed to the other dogs.

We feel that continued APHIS inspections of these establishments are vital in order to eliminate these types of substandard breeders.

## DOGFIGHTING AND COCKFIGHTING

In addition, we have concerns about dogfighting and cockfighting. Again, these are two issues that I personally investigate. I think it's one of the most barbaric acts imaginable to put two animals together to fight each other. Not only is it barbaric and cruel to the animals, I think it's a degrading and dehumanizing activity which is a serious offense to the sensibilities of civilized society.

In 1976, Congress recognized this and prohibited the interstate transportation of animals for fighting purposes. But USDA and APHIS have never budgeted this aspect to be enforced. In fact, Mr. Cochran, in your own State of Mississippi last year, there was a dogfight raid, and half of the participants from that dogfight raid were from out of State, and yet USDA took no action on it because there was no budget for them to do so. Dogfighting and cockfighting is a growing and pervasive problem in this country.

Another concern of ours is animal dealers. These are people who raise dogs or breed dogs and sell dogs for research institutions. Again, in many of these instances, these animals are kept in horrendous conditions. Last year, for example, in the State of Tennessee, I visited several dealers, and most of the dogs on the premises were severely malnourished and dehydrated and ill, and yet they were selling dogs to the University of Mississippi. And it was only because of APHIS being in place that APHIS went to the University of Mississippi and told them to stop buying dogs from this dealer, because he was an unlicensed dealer and because of the deplorable conditions. If APHIS had not been in place with the money to do this, this could not have been accomplished.

I would like to make one correction for the record. On page 4 of my submitted testimony, the first sentence of the second paragraph should read: "In short, the money you have appropriated to enforce the Animal Welfare Act has been money well appropriated." I wanted to clarify that, because, as you know, we both are concerned about the way APHIS is spending the money that has been appropriated to them, but we do feel that the solution isn't to stop funding them, but rather to have grave oversight and review of how the money is spent, so it's spent well to protect the animals.

This year, again, we are asking your help. In fiscal year 1985, USDA spent approximately $6 million to administer the provisions of this act. Given the additional requirements for laboratory animals passed by Congress in December 1985, additional funding is necessary in order to comply with the new provisions that in affording new protection for laboratory animals, require that a laboratory animal welfare information service be established at the National Agricultural Library in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to begin this service. Given this new mandate from Congress, the Humane Society of the United States is requesting that this subcommittee, in its wisdom and compassion for animals, appropriate the sum of $6,648,850 for fiscal year 1987 as the minimum amount required to implement the Animal Welfare Act as recently amended.

We appreciate your past response to the needs of the animals protected under this law, and once again we ask that you act to fill the void left by the Office of Management and Budget.

I thank you very much for allowing me to testify here today, and if you need any documentation or anything, we'll be glad to provide it for you.

Senator HARKIN. Mr. Baker, thank you very much.

Senator Kasten.

### HOT-BRANDING OF COWS

Senator KASTEN. I just wanted to make a comment and say that those of us who were concerned about the hot-branding of the cows in the whole-herd buy-out appreciate the work that you and groups such as the one you represent, have made. I think you've made a positive contribution.

The court now has held that freeze branding may be used as an alternative to hot-branding and other kinds of identification procedures. I think that's an example of groups such as the group that you represent, making a positive contribution through their participation in the public policy process. Speaking as a representative of the State of Wisconsin, America's Dairyland, I thank you.

Mr. BAKER. Well, I thank you for the very nice compliment, and I assure you we will continue to be active.

Senator HARKIN. In the interests of time, I would just second what Senator Kasten just said.

Mr. BAKER. Thank you, Mr. Chairman.

Senator HARKIN. Thank you very much.

[The statement follows:]

## STATEMENT OF ROBERT O. BAKER

MR. CHAIRMAN AND MEMBERS OF THIS SUBCOMMITTEE, I am a field investigator for The Humane Society of the United States (HSUS), the nation's largest animal-welfare organization. On behalf of our more than 400,000 constituents, many of whom we share with you, I appreciate the opportunity to present HSUS concerns about continued and adequate funding for enforcement of the Animal Welfare Act, which is administered by the Animal and Plant Health Inspection Service (APHIS).

The Animal Welfare Act was passed in 1966 and has been amended in the past 20 years extending protection to require adequate food, water, and housing to those animals kept in laboratories, zoos, circuses, and puppy mills, as well as those sold for research purposes by animal dealers. The most recent strengthening of this Act came in December, 1985, when important new provisions were added to afford better protection for laboratory animals. Although millions of animals are affected under this Act, the Office of Management and Budget (OMB) has committed an unconscionable act in recommending that APHIS' budget for enforcement be eliminated.

Funding for the Animal Welfare Act is a perennially afflicted item in the President's budget. Since FY 83, the Administration budget has recommended either major cuts or--as with the FY 86 and 87 proposed budgets--complete elimination of the program. While The HSUS has not always agreed with APHIS about the adequacy of enforcement, APHIS has been charged by Congress with vital inspections that no other arm of government is allowed to do. The HSUS has continuing concerns about the animals protected by the Act, we consider its continued ongoing and uninterrupted enforcement critical.

I would like to outline some of our concerns about specific areas of animal suffering, should this funding not be restored.

1. Laboratory animals: The original Animal Welfare Act was enacted for the protection of the millions of animals used in research. At a time when the federal government

spends billions of dollars to fund biomedical research, it is an outrage that this same government should eliminate the paltry sums budgeted last year for inspections of lab animals in these facilities. Since most state laws exempt research, teaching, and testing from their cruelty statutes, the Animal Welfare Act affords the only uniform, legal protection for these creatures. And, because the 99th Congress has given its overwhelming support for improvement of standards for lab animals, it is fitting that this subcommittee appropriate enough money for APHIS to carry out its mandate.

2. Zoo and circus animals: Under the Act, APHIS is also charged with licensing and inspecting the almost 1100 licensed animal exhibits across the nation. This group includes zoos, circuses and travelling shows, most of which keep a large number and wide variety of wild animals. We regularly encounter situations where even the most basic needs of the animals go unmet. Most commonly, deficiencies occur in the areas of shelter, sanitation, diet, cage size, and veterinary care. In the most extreme cases, APHIS has had to intervene in instances where animals have been physically abused. Given the special needs of these diverse species, as well as the large number of existing exhitors, uniform federal standards and inspections are vital to the well-being of these wild animals.

3. Puppy mills: Puppies bred in kennels that mass-produce dogs for pet shops are often victims of filth, inadequate shelter, insufficient food and water, disease, and lack of veterinary care. Since 1970, the Animal Welfare Act has required commercial breeders who wholesale puppies to the pet industry to be licensed and regulated by APHIS and to meet humane standards of care for their dogs. Continued APHIS inspections are vital in order to upgrade or eliminate substandard breeders.

4. Dog- and Cockfighting: Dog- and cockfighting are two terribly cruel blood sports that entail pitting two dogs or roosters together in a small enclosure while cheering spectators place bets on which animal will survive. In 1976, the Act was amended to prohibit these "sports." However, a consistent lack of adequate funding has prevented APHIS from enforcing these provisions.

5. Animal dealers: APHIS enforcement of the Act also requires licensing and registration of animal dealers who buy and sell dogs and cats for biomedical research and testing. These animals are often taken from animal shelters and humane societies, or sometimes are stolen pets. Flea markets and auctions provide dealers with another source of animals. APHIS has been instrumental in the investigations of research animal dealers who maintain their animals in substandard conditions. APHIS has recently closed the operation of one of the most flagrant violators of the Act. In addition, pressure from APHIS caused one of the nation's most prestigious universities to stop its acquisition of animals from substandard dealers operating out of a flea market. APHIS's continued presence is crucial in this area.

In short, the money you have appropriated to enforce the Animal Welfare Act has been money well ~~spent~~ appropriated. By restoring the funding the Administration has cut each year since FY 83, you have improved the living conditions for literally millions of animals.

This year, we ask your help again. In FY 86, USDA spent $5,898,850 to administer the provisions of the Act. Given the additional requirements for lab animals passed by Congress in December, 1985, additional funding is necessary in order to comply with the new provisions that, in affording new protection for lab animals, require that a lab animal-welfare information service be established at the

National Agriculture Library, in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to begin this service.

Given this new mandate from Congress, The HSUS is requesting that this subcommittee, in its wisdom and compassion for animals, appropriate the sum of $6,648,850 for FY 87 as the minimum amount required to implement the Animal Welfare Act, as recently amended. We appreciate your past response to the needs of the animals protected under this law. Once again, we ask that you act to fill the void left by OMB.

### SUBCOMMITTEE RECESS

Senator HARKIN. This concludes this morning's hearing. This afternoon, the subcommittee will meet again to review congressional and nongovernmental witness testimony beginning at 2 p.m. in this same room. Until that time, the subcommittee will stand in recess.

[Whereupon, at 11:37 a.m., the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

(AFTERNOON SESSION, 2 O'CLOCK, TUESDAY, MAY 6, 1986)

## NONDEPARTMENTAL WITNESSES

### SUBCOMMITTEE PROCEDURE

Members present: Senators Cochran, Mattingly, Abdnor, Specter, and Burdick.

Senator COCHRAN. The subcommittee will please come to order.

We continue this afternoon hearing from members of the public with respect to the budget proposal for the Department of Agriculture and related agencies.

We have had quite a few who have requested an opportunity to testify before the subcommittee. We are happy to accommodate as many as possible, but to do that, we have had to allocate small increments of time for all of our witnesses, and I hope that we can have each oral presentation limited to 5 minutes each.

We have approximately 15 groups or persons scheduled to testify this afternoon. We have your written statements, which we appreciate, and which will all be included in the record in their entirety, and we urge you to make such summary comments or highlight your statement for the benefit of the committee and for the benefit of all witnesses.

This is an important part of our hearing process, in my opinion, because we get the benefit of practical experience and personal observations, which are very helpful to the committee as we try to identify the appropriate levels of funding for the various activities and programs of the Department of Agriculture. It is a big undertaking, and we appreciate your assistance in this regard.

I should also point out that the subcommittee cannot receive any copyrighted material for our hearing record, unless arrangements have been made in advance by the witness to obtain permission of the copyright owner. This notice is given to protect the copyright owners, as well as the subcommittee and witnesses.

### U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL

**STATEMENT OF SEYMOUR JOHNSON**

We welcome as our leadoff witness today, Seymour Johnson, who is a personal friend of mine. Mr. Johnson is from Mississippi and represents the U.S. Agricultural Export Development Council. It is always good to see you, Seymour.

Mr. JOHNSON. Nice to see you again, sir.

Senator COCHRAN. We appreciate your being here, and urge you to proceed in any manner you wish.

Mr. JOHNSON. Thank you, sir. We appreciate the time to address this committee and make our concerns known to you.

I am testifying today on behalf of, as you said, the U.S. Agricultural Export Development Council, which is made up of some 67 members of mostly nonprofit organizations, better known as cooperators with the Foreign Agricultural Service. These members conduct market development activities overseas on the behalf of American agriculture in some 100 other nations, and they have done it for some 30 years.

I personally have been involved in two or three of these cooperator programs. They are very successful programs and definitely should be continued. Our concern today is that, although the 1985 farm bill addresses exports rather explicitly, we think, we are concerned that in the budget cuts proposed that we are not putting our priorities in the right place.

As we are looking at the program here today for the Foreign Agricultural Service and foreign market development, the USDA proposes an 18-percent reduction in the total USDA budget; a 32-percent reduction in the foreign market development; and for the activities which the cooperators participate in, some 50 percent.

Now, I thought the sense of the 1985 farm bill was to move exports. It appears to me that we are now getting ready to have a large sale, but we are reducing our sales force. It is a conflict here, sir. We would like to urge that Congress in some fashion address this problem and say that we need to maintain our export market abilities overseas. These are things that are not done overnight. It takes years and years of staff effort to develop these programs, and to reduce them now seems to be a little bit of folly when we have the capacity and we have the surpluses we need to move.

So, Senator, we would like to encourage you and your committee to see that these funds are restored rather than reduced.

I am concerned. We appreciate the administration and the Congress trying to reduce the budget, but if I had to say what the priorities are, this is one that should not take such a severe reduction. So we would appreciate what you can do in that behalf, sir.

### FAS COOPERATOR PROGRAM

Senator COCHRAN. Thank you very much. I know from my visits over the past several years with some of the national organizations, such as the American Soybean Association—which I know you have been involved in as president, as well as your being an active member in the U.S. Wheat Associates and some others—that the cooperator program has proven to be very helpful in increasing our share of markets overseas, and in finding and developing new markets. So I do know of the successes that the FAS cooperator program has had.

Some say, "well, maybe the Government does not need to put as much of its own money in that program anymore. Maybe the private organizations could take up the slack." What is the answer to that, if they say that to us?

Mr. JOHNSON. Well, Senator, I do not need to remind you of the difficulties we have on the farm today, as far as credit goes, and as far as the cash flow of farmers. I serve on the board of three agencies doing collecting for market development, and it is extremely hard now to ask the farmer to come up with additional funds to maintain these programs.

Some other time—we are all trying to increase them. I know we are making efforts in several commodities to increase these funds. But it is an awfully difficult point to make at this time, sir.

### MARKETING LOANS

Senator COCHRAN. I have been told that in the case of rice particularly, and maybe it will prove to be true for cotton, that the marketing loan program has signaled the beginning of a new era of competitiveness for U.S. agriculture production in overseas markets. Do you get the same kind of input from those involved in the rice business?

Mr. JOHNSON. I heard on the radio coming over in the taxi a while ago that it became an issue in the Tokyo economic summit just hours ago. So, yes; it is obviously making some impact.

Senator COCHRAN. Well, I think we have to look for ways to improve our ability to compete. We have been losing market share, and declining exports have really caused a serious problem for American agriculture, I think. So much of what we produce we have to sell overseas, and that is where the growth markets—that is where the growth potential is for U.S. agriculture.

So I am generally sympathetic with what you are saying, and I hope that our committee can work with the House and work with the administration to come up with some additional funds for these important programs. You can count on our committee working in that direction.

Mr. JOHNSON. Thank you, sir.

Senator COCHRAN. Thank you very much for being here and helping us begin this afternoon's session of hearings. Thank you.

[The statement of Mr. Johnson follows:]

## STATEMENT OF SEYMOUR JOHNSON

Mr. Chairman, my name is Seymour Johnson, a farmer from Indianola, Mississippi. I am also a member of the Board of Directors of the Cotton Council International.

It is an honor to represent the U.S. Agricultural Export Development Council before this subcommittee. The USAEDC's 67 members participate in the foreign market development programs of the Foreign Agricultural Service. Most of our members are producer and agribusiness organizations, predominantly non-profit, who over 30 years have established efficient market development networks in over 100 countries.

The United States in the 1980's faces keen competition in virtually all industries. From steel to semiconductors, our nation's businesses find themselves in a world where the competition is tough and not always fair. It's the same way in agriculture. As we set our sights on the end of the century and beyond, we must face this hard fact: There are no guaranteed markets for U.S. agriculture. This country is going to have to scrap for its share of world food and fiber markets.

Yet in this ever-more-competitive world, the opportunities are breathtaking. The aim of the market development projects our members undertake is to grasp those opportunities ... to expand the world's willingness and desire to consume the products U.S. agriculture has to offer.

The 1980s are a decade of opportunity -- and an opportunity is a question mark. Will we renew our commitment to an agriculture second to none? Will we reassert our historic leadership in the world's most basic industry?

### Funding Outlook for Market Development

While the challenge facing cooperators and the U.S. government is greater than ever before, the funding tools with which to carry on this effort are in jeopardy. USDA programs are being reduced by 18 percent but foreign market development faces a 32 percent cut. Our total 1986 market development activities amount to $37.5 million, and the final allowance of $18.5 million for 1987 represents a 50 percent reduction.

If the Gramm-Rudman-Hollings reductions are implemented, it is also expected that cooperator programs will be reduced by 50 percent in FY1987. Beyond FY1987, the Gramm-Rudman-Hollings reductions could phase out U.S. Government funding for cooperator programs altogether. This approach would hardly be consistent with the strong support Congress has historically provided for this modest but important program, and it would also undermine the mandate of the 1985 farm bill to increase agricultural exports.

The implementation of such an abrupt reversal in funding for the cooperator programs will carry serious implications for program activities. In the case of cooperators with overseas offices, there will need to be a scaling back of offices and personnel. This means we will need to have overseas staff come home early. We also need to recognize that with the value of the dollar now declining, our budgets will buy less in terms of overseas activity.

We doubt that this is what congress had in mind for the market development program. Cooperator funding is not a major part of even the Department of Agriculture's total budget. However, the issue is not just the amount of money, it is also the priority of market development.

Congress has come down clearly and squarely in support of agricultural market development in the past. This proposed budget suggests that market development is not a high priority and that we should "cut and run". We find it hard to accept that view, and we doubt that congress will either.

## The 1985 Farm Bill: Tools for Trade Expansion

This Congress wrote new agricultural legislation last year. What emerged was not perfect and did not perfectly satisfy anyone. That shouldn't be surprising. The new law does, however, provide the tools for expanding export sales. We must use the tools efficiently and fully if we want to take advantage of the opportunities in today's world market.

* The new intermediate credit guarantee program had wide support throughout the agricultural community. It should be implemented quickly, and we urge this subcommittee to monitor its progress closely. Not only can intermediate credit provide a more favorable payment schedule for middle-income customers, it can and should also be used to finance infrastructure in developing nations -- storage facilities for U.S. grains, for instance.

* The P.L.480 Food for Peace program, begun in 1954, has become doubly important in light of the continuing Third World debt crisis. The new farm law makes useful reforms in the program, among them new authority for a portion of local-currency repayments to be used for private sector market development.

* Vigorous use of traditional programs like GSM-102 credit guarantees is needed. Their worth is proven, and the level should be continued at $5 billion in the face of strong market competition. The

FY1987 budget again proposes a five percent origination fee that would defeat the purpose of the GSM-102 program as our foreign customers would find it too expensive to use. The five percent origination fee would increase the cost to the buyer by an estimated additional 20 cents per bushel for wheat and 15 cents per bushel for feedgrains. A 25,000 ton sale would cost an extra $183,500 for wheat and $147,000 for feedgrains. Currently the guarantee fee ranges from one-third to two-thirds of one percent. An increase to five percent would make it impossible for the U.S. to compete in world markets.

* The new export bonus program deserves the attention of Congress, as does the mandate for $325 million, since reduced to $110 million, in export assistance to combat unfair foreign trade practices. There are plenty of unfair policies out there, from European export restitutions for wheat and flour, to Canadian transportation subsidies of $1 per bushel on wheat exports and Argentine incentives to dump soybean meal. The question is, will the United States use its new authority to fight these subsidies and bring other nations to the bargaining table? We hope you will insist that the Congressional mandate be carried out.

* The farm bill also calls for experimental barter initiatives. These programs are promising because of the foreign exchange constraints on many of our customers. We suggest the subcommittee promote an East Bloc country as one partner in the barter experiment. Not only might such a barter arrangement contribute to improved international relations, it would help develop the demand potential in the centrally planned economies -- a potential most analysts agree is considerable.

It is of great concern that many of these initiatives are on hold because of opposition from the State Department and others. Legislative efforts are being undertaken to weaken these provisions at the behest of Canada and Australia. We would urge that these initiatives be used to expand markets and also send a message to subsidizing countries. Taking these tools away before the negotiations are successful would likely assure failure of the process.

## The Cooperator Program: The Need has Never been Greater

At the moment, as everyone in this room knows, our export potential is far greater than the reality. U.S. agricultural exports have hit what we have to hope is the bottom of a steep downward slope. Last year's export value was the lowest since 1979 -- and at the moment, wheat exports are running at only about half last year's pace, while corn exports are 20 prcent below last year at this time.

New price support mechanisms in the 1985 farm bill may help reverse the export downtrend, but it would be unrealistic to expect price support policy to carry the whole burden of demand expansion: Price is not the sole determinant of demand.

The FAS cooperator program has evolved over 30 years into a productive partnership for opportunity and market growth. It brings together the efforts -- and investments -- of producers, the public and so-called "third-party" contributors, often private industry in target countries.

To decide whether this partnership is worthwhile, you really only have to ask: Are agricultural exports worthwile? Besides being essential for a healthy agriculture, food and fiber exports also enhance the U.S. trade position. The 1984 U.S. trade deficit was $105 billion, but without that year's agricultural trade surplus, the total shortfall would have been $125 billon instead. That would have meant more lost jobs, lower GNP and a less healthy economy.

We believe agricultural exports are important to the economic security of the United States, and we believe the 30-year record of FAS's cooperator program speaks for itself. The program is a worthwhile investment, but one that calls for continued commitment.

The 1986 budget request included no additional funds for expansion of cooperator programs. When we testified last year, we explained we'd been working with FAS to allocate resources to those markets and programs which offered the best return on everyone's investment -- the most economically sensible opportunities for creating maximum market potential.

FAS has drawn down its reserves in the past year, and so the time has come when an increased federal commitment is necessary to take advantage of the market potential that exists in the 100 countries we serve. Producer groups are facing increasing challenges to maintain their share of funding contributions: Today's low farm prices encourage more producers to seek refunds in state checkoff programs, while for some commodities, increased use of the price support loan program removes many millions of bushels from the checkoff funding system altogether.

The President's budget for FY1987 cuts some $13 million in market development funding. With the increasingly competitive market in most commodities, and given the need to maintain ongoing projects particularly in developing countries, we believe it is essential to restore this $13 million to the market development budget if the nation intends to pursue a farm policy that is firmly oriented toward markets. Indeed, a modest $2 million increase beyond this amount would allow Cooperators and FAS to proceed with a vigorous effort consistent with the needs in today's market.

The biggest reason, though, for an increased commitment to market development is the 1985 farm bill itself. It gives us a chance to rebuild our lost market share, to rebuild our competitiveness. The chance is there, but the choice must be made: Will we do the legwork, will we hustle for sales ... will we develop markets? We must not pass up the opportunity afforded us by the new farm bill. We must not abandon an investment program whose value has been well documented.

If we do the legwork of market development and increase our sales, we'll see a payoff -- and not only in improved producer income. Per-bushel federal budget exposure was significantly increased for many crops in the new farm bill. Low prices, more than ever, will mean high government costs. The ultimate answer to this quandary is increasing demand. That will lead to higher prices and lower federal payments.

## Outlook and Opportunity

Today, some people are preaching Malthusianism in reverse. Instead of predicting famine, they forsee a feast: They note the very real production gains in many Third World countries, and conclude that the world has become self-sufficient and well-fed. Then they take further note of the competitive problems U.S. agriculture has faced in this decade, and assert that the world really doesn't need American food and fiber producers.

We believe the reverse-Malthusians are just as wrong as **Malthus himself** has so far proven to be. The truth is, the world can **be fed** ... but it's going to take U.S. agriculture to do it. We should recall that some so-called experts were just a few years ago projecting famine and starvation.

Many countries can grow the same crops we grow, and some of them are able to grow some crops more efficiently than we can. From the longer view, however, nobody else has the combination of climate, soil, technology, private-sector synergy, infrastructure and farm-to-port efficiency that the U.S. agriculture industry has.

USDA's January 13 report on the world grain situation sees the possibility of increased demand, not world self-sufficiency. That means the opportunity exists for market-building. We can make more sales for the United States, and U.S. agriculture can compete with any agricultural industry on earth, if given a fair chance.

The United States must make a commitment to being a competitive agricultural exporting nation. That means --

* A rational fiscal policy, and a monetary policy that's export-oriented, to produce a reasonably valued dollar;

* Guarantees of our reliability as a supplier;

* Tough, coordinated action to remove foreign trade barriers and unfair export subsidies;

* A U.S. agricultural policy that stresses demand expansion and market growth; and

* Having the tools to expand agricultural exports and the willingness to use them.

The last two items on that checklist obviously have to include market development. The partnership between producers and the public through the FAS cooperator program has been a successful one. We can be proud of the record, and proud that producers are doing their very best to keep up their end of the bargain. I ask this subcommittee to make sure the partnership continues.

## LIST OF STATISTICAL INFORMATION ENCLOSED

I. Historical Summary - Value of U.S. Foreign Trade and Trade Balance FY 1970-1985

II. Expenditure of Federal Funds and Cooperator Contributions and total agricultural exports FY 1971-1985

III. USDA and Cooperator Market Development Expenditures expressed as a percentage of total agricultural exports FY 1971-1985

IV. Agricultural Exports and Market Development Expenditures of the United States and its Principal Competing Countries

HISTORICAL SUMMARY
VALUE OF U.S. FOREIGN TRADE AND TRADE BALANCE

FISCAL YEARS 1970 - 1985

| FISCAL YEAR | U.S. EXPORTS | | | | U.S. IMPORTS | | | | TRADE BALANCE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AGRICULTURAL | NON-AGRICULTURAL | TOTAL | % AGRICULTURAL OF TOTAL | AGRICULTURAL | NON-AGRICULTURAL | TOTAL | % AGRICULTURAL OF TOTAL | AGRICULTURAL | NON-AGRICULTURAL | TOTAL |
| | Million Dollars | | | % | Million Dollars | | | % | Million Dollars | | |
| 1970 | 6,598 | 34,337 | 41,295 | 15 | 5,686 | 33,379 | 390,655 | 14 | +1,272 | +958 | +2,230 |
| 1971 | 7,955 | 35,928 | 43,883 | 18 | 6,128 | 38,744 | 44,872 | 13 | +1,827 | -2,816 | 989 |
| 1972 | 8,242 | 36,633 | 44,875 | 18 | 5,936 | 45,926 | 51,862 | 11 | +2,306 | -9,293 | -6,987 |
| 1973 | 14,984 | 47,759 | 62,743 | 23 | 7,737 | 57,521 | 65,258 | 11 | +7,247 | -9,672 | -2,515 |
| 1974 | 21,559 | 69,423 | 90,982 | 23 | 10,031 | 81,995 | 92,026 | 10 | +11,528 | -12,572 | -1,044 |
| 1975 | 21,817 | 83,178 | 104,995 | 20 | 9,435 | 89,251 | 98,686 | 9 | +12,382 | -6,073 | +6,309 |
| 1976 | 22,742 | 89,047 | 111,789 | 20 | 10,492 | 103,743 | 114,235 | 9 | +12,250 | -14,696 | -2,446 |
| 1977 | 23,974 | 95,144 | 119,118 | 20 | 13,357 | 129,061 | 142,418 | 9 | +10,617 | -33,917 | -23,300 |
| 1978 | 27,289 | 104,270 | 131,559 | 20 | 13,886 | 152,095 | 165,981 | 8 | +13,403 | -47,825 | -34,422 |
| 1979 | 31,979 | 135,639 | 167,618 | 19 | 16,186 | 177,424 | 193,610 | 8 | +15,793 | -41,785 | -25,992 |
| 1980 | 40,481 | 169,753 | 210,234 | 19 | 17,276 | 219,305 | 236,581 | 7 | +23,205 | -49,552 | -26,347 |
| 1981 | 43,788 | 185,415 | 229,203 | 19 | 17,218 | 237,469 | 254,687 | 6 | +26,570 | -52,054 | -25,484 |
| 1982 | 39,094 | 176,311 | 215,405 | 18 | 15,346 | 233,488 | 248,834 | 6 | +23,748 | -57,177 | -33,429 |
| 1983 | 34,769 | 159,373 | 194,142 | 17 | 16,271 | 229,438 | 245,709 | 6 | +18,498 | -70,065 | -51,567 |
| 1984 | 38,027 | 170,014 | 208,041 | 18 | 18,916 | 295,088 | 314,004 | 6 | +19,111 | -125,074 | -105,963 |
| 1985 | 31,185 | 179,252 | 210,437 | 14 | 19,740 | 313,723 | 333,463 | 5 | +11,445 | -134,471 | -123,026 |

Source: 1970-1985 USDA, ERS. U.S. Foreign Ag. Trade Statistical Report Fiscal Year 1985, Page 1.

FISCAL YEAR EXPENDITURES OF FEDERAL FUNDS AND
COOPERATOR CONTRIBUTION AND TOTAL AGRICULTURAL EXPORTS

| | (1) FEDERAL FUNDS | (2) | (3) | (4) | (5) | (6) FUNDS DISTRIBUTION | (7) | (8) | (9) MARKET DEVELOPMENT COSTS | (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| FISCAL YEAR | PROJECTS | FAS | TOTAL | COOPERATOR FUNDS | TOTAL FUNDS | FEDERAL | COOPERATOR | AGRICULTURAL EXPORTS | FEDERAL | COOPERATATOR |
| | $1,000 | | | | | % of Total | | $Million | % of Export Value | |
| 1971 | 8,847 | 858 | 13,705 | 18,613 | 32,315 | 42 | 58 | 7,955 | .11 | .23 |
| 1972 | 10,054 | 1,730 | 11,874 | 20,605 | 32,389 | 36 | 64 | 8,242 | .12 | .25 |
| 1973 | 10,045 | 930 | 10,975 | 22,112 | 33,087 | 33 | 67 | 14,984 | .07 | .15 |
| 1974 | 10,234 | 658 | 10,892 | 23,342 | 34,234 | 32 | 68 | 21,559 | .05 | .11 |
| *1975 | 11,739 | 830 | 12,659 | 26,997 | 39,566 | 32 | 68 | 21,817 | .05 | .12 |
| 1976 | 10,922 | 796 | 11,718 | 24,158 | 35,876 | 33 | 67 | 22,742 | .05 | .11 |
| 1977 | 11,719 | 798 | 12,517 | 29,420 | 41,937 | 30 | 70 | 23,974 | .05 | .12 |
| 1978 | 13,926 | 879 | 14,805 | 35,331 | 50,136 | 30 | 70 | 27,289 | .05 | .13 |
| 1979 | 16,709 | 963 | 17,672 | 39,660 | 57,332 | 30 | 70 | 31,979 | .05 | .12 |
| 1980 | 18,778 | 1,165 | 19,943 | 47,373 | 67,316 | 30 | 70 | 40,481 | .05 | .12 |
| 1981 | 20,195 | 1,014 | 21,209 | 51,502 | 72,711 | 29 | 71 | 43,788 | .05 | .12 |
| 1982 | 20,641 | 878 | 21,519 | 54,804 | 76,323 | 28 | 72 | 39,094 | .06 | .14 |
| 1983 | 23,373 | 869 | 24,242 | 65,790 | 90,032 | 27 | 73 | 34,769 | .07 | .19 |
| 1984 | 27,429 | 1,501 | 28,930 | 61,271 | 90,201 | 32 | 68 | 38,027 | .08 | .16 |
| 1985 | 31,073 | 1,213 | 32,286 | 70,328 (Est.) | 102,614 | 31 | 69 | 31,185 | .10 | .23 |

* Cover 15 month period.

FOOTNOTES:

| | |
|---|---|
| (1) | FAS Expenditures for Cooperator Projects. |
| (2) | FAS Expenditures for own projects. |
| (3) | Column (1) + (2). |
| (4) | Cooperator expenditures from own and related funds including foreign. |
| (5) | Total expenditures for foreign market development. |
| (6) & (7) | Share of total expenditures by source. |
| (8) | Value of total U.S. exports of agricultural commodities. |
| (9) & (10) | Market development costs as percent of value of total exports. |

NOTE: If forest products are included, the agricultural exports for 1982 would total $41.9 billion, and the Federal and cooperator market development costs would be .05 and .13 percent respectively; 1983 would total $37.6 billion, and the Federal and cooperator market development costs would be .06 and .16 percent, respectively; 1984 total $40.7 billion and the Federal and cooperator market development cost would be .07 and .15 respectively; 1985 total $33.8 billion and the Federal and cooperator market development cost would be .10 and .18.

## USDA AND COOPERATOR MARKET DEVELOPMENT EXPENDITURES EXPRESSED AS A PERCENTAGE OF TOTAL AGRICULTURAL EXPORTS

### FISCAL YEARS 1971 - 1985

| FISCAL YEAR | EXPORTS ($ billions) | MARKET DEVELOPMENT 1/ ($ thousands) | PERCENT OF EXPORTS |
|---|---|---|---|
| 1971 | 8.0 | 20,569 | 0.26 |
| 1972 | 8.2 | 18,785 | 0.23 |
| 1973 | 15.0 | 18,536 | 0.12 |
| 1974 | 21.6 | 18,600 | 0.09 |
| 1975 | 21.8 | 21,656 | 0.10 |
| 1976 | 22.7 | 21,593 | 0.10 |
| 1977 | 24.0 | 25,069 | 0.10 |
| 1978 | 27.3 | 30,000 | 0.11 |
| 1979 | 32.0 | 33,935 | 0.11 |
| 1980 | 40.5 | 39,748 | 0.10 |
| 1981 | 43.8 | 42,344 | 0.10 |
| 1982 | 39.1 | 49,594 | 0.13 |
| 1983 | 34.8 | 54,448 | 0.16 |
| 1984 | 38.0 | 59,558 | 0.16 |
| 1985 (Estimate) | 31.2 | 67,920 | 0.22 |

1/ Excludes Foreign Third Party Contributions.

Agricultural Exports and Market Development Expenditures
of the United States and Its Principal Competing Countries 1/

1982-84

| COUNTRY | REVISED 1982 | | | REVISED 1983 | | | ESTIMATED 1984 | | |
|---|---|---|---|---|---|---|---|---|---|
| | EXPORTS | MARKET DEVELOPMENT | PERCENT OF EXPORTS | EXPORTS | MARKET DEVELOPMENT | PERCENT OF EXPORTS | EXPORTS | MARKET DEVELOPMENT | PERCENT OF EXPORTS |
| | (Billion) | (Million) | Pct. | (Billion) | (Million) | Pct. | (Billion) | (Million) | Pct. |
| Australia 2/ | US$ 8.2<br>A$ 7.4 | 76.0<br>68.8 | .93 | 8.4<br>8.5 | 74.5<br>75.2 | .88 | 9.2<br>10.1 | 68.4<br>75.3 | .75 |
| Canada 3/ | US$ 7.6<br>C$ 9.3 | 12.2<br>14.5 | .16 | 7.7<br>9.5 | 13.6<br>16.9 | .18 | 7.6<br>9.8 | 15.6<br>19.3 | .20 |
| Denmark 4/ | US$ 4.0<br>DKr 33.4 | 20.4<br>169.4 | .51 | 3.7<br>34.5 | 20.2<br>186.7 | .54 | 3.8<br>38.6 | 19.6<br>201.5 | .52 |
| France 4/ | US$ 15.5<br>FF 101.4 | 28.4<br>188.2 | .19 | 15.6<br>120.0 | 27.9<br>214.5 | .18 | 15.9<br>137.6 | 25.7<br>222.5 | .16 |
| Israel 4/ 5/ | US$ .9 | 13.1 | 1.46 | .8 | 10.6 | 1.33 | N.A | N.A | |
| Netherlands 4/ | US$ 13.9<br>DFl 37.0 | 44.2<br>117.8 | .32 | 15.0<br>43.3 | 35.4<br>102.2 | .24 | 14.8<br>48.3 | 33.6<br>110.1 | .23 |
| New Zealand 6/ | US$ 4.1<br>NZ$ 4.7 | 40.6<br>52.8 | .99 | 3.5<br>5.2 | 43.0<br>64.8 7/ | 1.23 | 3.5<br>5.7 | 48.3<br>95.4 | 1.38 |
| South Africa 4/ | US$ 2.0<br>R 2.1 | 15.2<br>16.2 | .77 | 1.5<br>1.7 | 13.2<br>14.6 | .86 | 1.2<br>1.8 | 12.6<br>18.9 | 1.05 |
| TOTAL | $56.1 | $250.5 | .45 | $56.3 | $238.5 | .42 | $56.0 | $223.8 | .39 |
| UNITED STATES 8/ | $39.1 | $51.9 | .13 | $34.8 | $56.8 | .16 | $38.0 | $65.2 | .17 |

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1/ Exchange rate source: Treasury Reporting Rates of Exchange, Department of the Treasury Fiscal Service, Bureau of Government Financial Operations.

2/ July-June fiscal year data.

3/ Export data based on calendar year, market development expenditures on April - March fiscal year.

4/ Calendar year data.

5/ Israeli data is reported in U.S. dollars, the unit of account prevalent in Israel for reporting market development expenditures and exports. To convert these figures to Israeli Shekels for comparison's sake would not be meaningful due to the Shekel's steady devaluation in relation to the U.S. dollar. Data for CY 1984 was not available at the time of this report.

6/ Export data based on calendar year for 1982 and 1983, and on July-June Fiscal Year for 1984. Market development expenditures are aggregated over various fiscal years.

7/ Does not include trade show budget for 1983 -- figures are not currently available.

8/ October-September fiscal year data. Source for export data is Foreign Agricultural Trade of the United States (FATUS). Market development data includes FAS funds and U.S. cooperator contributions.

## ACHIEVEMENTS OF THE U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL AND THE FOREIGN AGRICULTURAL SERVICE JOINT EFFORT TO DEVELOP FOREIGN MARKETS

### AMERICAN ANGUS ASSOCIATION

During 1985, foreign customers showed considerable interest in purchasing semen from leading U.S. Angus herd sires and foundation females.

Efforts to develop an Argentine market began in late 1984, when 163 cows were flown to Argentina and sold to several Argentine breeders.

At the 1985 Palermo Livestock Show in Buenos Aires, evidence of the influence of North American cattle became apparent: more than 95 percent of the 321 head entered in the show were either progeny or grand progeny of U.S. sires and almost all prize winners were descendants of U.S. sires and/or dams.

Several Argentine breeders visited the American Angus Association headquarters and some leading U.S. Angus herds in 1985 and at least three large groups from Argentina will be visiting the United States in the near future. Among the planned stops are: the U.S. Animal Research Center, Clay Center, Neb.; National Packers, Liberal, Kan.; the North American International Livestock Show, Louisville, Ky,; and the National Western Livestock Show, Denver, Colo.

A South African Angus breeder purchased five registered Angus bulls from a Missouri farm at an average $5,000 per bull. The bulls were transported by ship from Houston, Texas in January, 1985.

U.S. bulls dominated the 299-head World Angus Forum Angus Show in Edmonton, Alberta in July, 1985, taking honors for Grand Champion bull, Senior Champion, and Reserve Senior Champion. Following this successful event Angus Breeders in the United States have seen increased interest in the purchase of semen from the best herd sires of the breed, open heifers and bred cows.

Clearly, foreign breeders are looking to the U.S. for leadership in order to further refine their beef cattle industry, and one reason is the FAS market devleopment cooperator program. There is no doubt that demand for U.S. seedstock and semen will continue if we continue to foster the excellent rapport we now have with foreign breeders.

### AMERICAN HEREFORD ASSOCIATION

A classic example of the effectiveness of cooperation between the Foreign Agricultural Service and American Hereford Association came at the 1985 National Western Livestock Show in Denver, Colo.

For 20 years the American Hereford Association, as an FAS cooperator, has maintained close contact with cattlemen in Mexico, the leading export buying country of U.S. beef cattle breeding stock, and this year two Mexican cattlemen bought 34 head at the show and at private treaty for an estimated $80,000. Not only were the purchases impressive in terms of absolute value, but the competitive bidding boosted the overall prices of all Herefords sold at the traditional Denver Stock Show.

Five head of American Herefords are being prepared for shipment to Australia. This is the largest shipment of Herefords exported to Australia in many years. The selections, based on visual appraisals and performance records, include three females from Connell, Wash., one bull from Manhattan, Mont., and one calf from Walla Walla, Wash.

### AMERICAN LEGEND COOPERATIVE

The American Legend Cooperative (formerly the EMBA Mink Breekers Association) has conducted a number of promotional activities in Japan, one of the world's fastest growing fur markets.

In September, 1984, American Legend and USDA's Foreign Agricultural Service sponsored four fashion shows in Tokyo. Attending the shows were more than 3,500 invited guests representing leading members of the Japanese fur trade, as well as furriers and designed from Spain, France, Italy and Hong Kong and news media representatives. The shows received considerable local press and television coverage, reaching most of the potential consumers of fur garments in Japan.

While it still is too early to measure the sales impact of the shows, the extensive favorable publicity generated gave U.S. mink a new level of prestige and recognition. American Legend and FAS will try to capitalize on this by following up with print advertisements.

### AMERICAN POLLED HEREFORD ASSOCIATION

Despite the virtual closure of the Australian beef cattle market to U.S. exporters, efforts to promote U.S. beef genetics in Australia have continued. An initial two-year effort to ship one Polled Hereford bull to Australia in 1981 has since grown, and today Australia is a significant U.S. market for beef cattle genetic products. In 1985, Australia purchased 80 live cattle at nearly $10,000 per head.

### AMERICAN QUARTER HORSE ASSOCIATION

The American Quarter Horse Association's ongoing efforts to stimulate overseas demand for American quarter horses met with particular success in one new market and one ongoing market.

In France, the American quarter horse was virtually unknown until 1984 because French law prohibited direct imports from the United States. When the law was changed in 1984, the American Quarter Horse Asociation (AQHA) began a series of promotional activities to educate French horse enthusiasts about the qualities of quarter horses. In August of that year, a team traveled to France to conduct clinics and promote American quarter horses, and since that time, 15 horses valued $225,000 have been exported directly from the United States to France.

In Australia, sales of American quarter horses had declined sharply over the last 5 years, but now are rising through the efforts of the American Quarter Horse Association (AQHA). When Australians stopped travelling to the United States for new breeding stock, AQHA began sending technicians to Australia each year to evaluate the quarter horses there. These technicians informed the Australian breeders of the quality of American quarter horses available in the United States and how these horses could help improve the quality of quarter horses in Australia, which is difficult without the introduction of new bloodlines. As a result, an Australian buying team visited the United States during 1985 and purchased 12 American quarter horses — the largest number exported to Australia in one shipment since 1980.

### AMERICAN SEED TRADE ASSOCIATION

The American Seed Trade Association's achievements in opening new foreign markets for U.S. seeds included successful programs in Brazil, Morocco and Saudi Arabia.

Through the combined efforts of the American Seed Trade Association, U.S. Agricultural Counselor's office in Brasilia, and USDA's Animal and Plant Health Inspection Service, Brazil's phytosanitary requirements for U.S.-grown soybean, corn, bean, and sorghum seed have been modified to allow the export of these seeds to Brazil.

On four occasions, ASTA seed teams have discussed these issues with Brazilian Plant Health Officials and on one occasion it was an agenda item of the U.S.-Brazil bilateral discussions. A recent ASTA marketing plan activity brought the Brazilian Director of Plant Health to the U.S. for meetings with his counterparts in Washington where technical assurances were given that seeds of these crops could be shipped to Brazil free from seed-borne diseases and other pathogens.

Based on these discussions, Brazil has modified its phytosanitary requirements to allow the import of these seeds. This then reopens a market with very large potential for U.S. seed sales.

The Moroccan government until recently permitted imports of only those seeds that were officially registered, which requires four to five years of official performance trials. The requirements also posed considerable risk to U.S. producers, who had to surrender their parent lines without assurances that they would be adquately protected. Few U.S. seed producers were willing to risk losing control of their parent stock because of negligence or the lack of satisfactory safeguards. Thus, no U.S. commerical bids could even be considered, much less accepted, unless the seed varieties offered were already registered.

But recent U.S. seed teams and the agricultural attache in Rabat have worked together to overcome these constraints to U.S. seed sales to that country. The Moroccan government now will allow the import of unregistered U.S. seed varieties in non-controlled production sectors, e.g., vegetables and forages that will be field tested for one to two years by growers before being considered for unrestricted commercial sale. In the controlled production sector, e.g., grains and oilseeds the para-statal farms will play a more direct role in the one- to two-year evaluation process.

The government's cutting in half of the seed testing period and its waiving the previous requirement that parental lines be make available for government testing makes Morocco a much more accessible market for U.S. seed companies.

Until recently, Saudi Arabia offered little potential for U.S. seed sales in areas with available water. But with the adoption and implementation of irrigation technology, the Saudis imported 102,000 MT of wheat seed in 1984, all of which came from the U.S. ASTA, in close cooperation with the U.S. Agricultural Trade Office in Jeddah, and USDA's Animal and Plant Health Inspection Service helped resolve numerous problems in meeting Saudi certification and plant health standards and qualifying U.S. wheat seed for shipment.

Alfalfa seed shipments to Saudi Arabia increased 150% in 1984 over the previous year. This increase can be attributed in part to the adoption of center pivot irrigation techniques developed in the USA. ASTA anticipates that alfalfa and other forage grass seed exports will continue to increase.

## AMERICAN SOYBEAN ASSOCIATION

In 1985, the American Soybean Association participated in 394 activities in 84 countries. Some examples of how these efforts helped to increase the demand for American soybeans and products are as follows.

In Japan, the poultry industry traditionally has used up to 10 percent fishmeal in the poultry ration. In an effort to replace this product with soybean meal, ASA conducted with major poultry producers a feeding trial. The study confirmed that soybean meal was both more economical and more nutritious to use. If accepted by the Japanese poultry industry, every one percent of fishmeal replaced by soybean meal will create an additional soybean import demand of 5.9 million bushels.

Due to poor quality of feed, the adverse effects of the tropical climate and the fact that only about 15 percent of the 1.2 million hogs are efficiently managed, swine production in Mexico is limited. To counter this problem, ASA began in 1983 a series of feeding trials aimed at demonstrating that modern management and nutrition practices could improve production and profitability. Raw or extruded soybeans were used in a series of studies, resulting in a 63,000 MT increase in soybean demand in 1985. Future growth is expected to be 15 percent annually.

ASA also has worked with the Mexican poultry industry to create demand for roasted full-fat soybeans. A local feed plant was convinced to install the necessary machinery to produce the new form of poultry feed. Already 3,000 metric tons of the roasted soybeans are being used by local producers, with potential demand estimated at 5,000 MT per week.

The emerging swine and poultry industries in Korea have limited information on modern production techniques and management practices. As a result, they have not been aware of the need for quality feed to most efficiently raise their livestock. Since the 1979 opening of its Korean office, ASA has produced and distributed nine technical publications on modern livestock nutrition and invited to Korea more than 30 consultants to host seminars and hands-on demonstrations. Because of this support, demand for mixed feed increased by 2.5 million MT from 1980 through 1984. During the same period, the use of soybean meal in the ration grew from 8.7 to 10.2 percent, resulting in an increased demand of 300,000 MT.

ASA also is promoting increased use of soybean oil in Korea by working with consumers in a series of trade promotions at department and grocery stores. The results have been a 35,000 MT increase in demand for soybean oil in only four years. To fill this market, an additional 197,000 MT of soybeans were imported.

Rapid growth in poultry production, coupled with a supply of low quality feed was a challenge ASA faced in Turkey. To solve this problem, ASA provided a technician to work with the feed milling industry to increase both production and quality. ASA also distributed a poultry nutrition handbook to poultry industry members and assisted Turkish national television in producing a film that describes the importance of soy in the protein diet. Because of this support, the Turkish Development Foundation has progressed with its plan to build 14 new feed mills. In addition, 25 Turkish feed millers have increased their technical competence by attending a training course in the United States. Thus, by 1984, Turkey made its first purchase of U.S. soybeans: 80,000 MT of beans and 15,000 MT of meal. This market should grow at least 10 percent each year, resulting in additional soybean imports of 100,000 MT in 1985.

Lack of technical expertise and imports of meat from other European Community countries has limited Greek expansion of pork production. To increase soybean meal demand beyond the present 200,000 MT, ASA has worked with pork producers, universities, and government agencies to computerize swine records and thus pinpoint areas of potential loss and profit. A U.S. technician also visited Greece to describe U.S. pork promotion programs and how they can be adapted to Greece's requirements. Because of ASA-supported feeding trials which showed that feed conversion can be increased by 12 percent in young pigs, full-fat soybean has been introduced into the swine diet. Consumer pork demand is expected to increase by 40 percent in the next five years, and U.S. soybean exports to Greece doubled to 138,000 MT over the previous year.

Although soyfood has been used traditionally in Indonesia, little was known about its nutritional value and ways to process soy into other forms of food. Recognizing this barrier, ASA sponsored trade teams to the U.S. to study our soyfood industry, promoted educational campaigns in the country to create a greater awareness of soy and worked directly with government agencies and private processors to popularize soy in the diet. Since the inception of this promotional effort, soyfood consumption increased from 754,000 MT in 1980 to nearly 1.2 million MT in

1984. To support this demand, soybean imports tripled in five years to nearly 430,000 MT in 1985.

### BROWN SWISS CATTLE BREEDERS' ASSOCIATION OF THE U.S.A.

Brown Swiss cattle export prospects received encouragement from two important activities in fiscal 1985.

Some 150 bulls and heifers were exported to the Fondo Ganadero in Honduras. This was the first importation of U.S. dairy cattle for the Fondo, a new private-government cooperative organization working to improve Honduran agricultural production and funded by the U.S. Agency for International Development.

Seven Chinese trainees are now spending one year working on U.S. Brown Swiss dairy farms to learn first-hand management techniques used in the U.S. for optimal milk production. The trainees subsequently will return to China to oversee and train technicians to care for and handle high-producing cattle imported from the U.S.

### CALIFORNIA ALMOND GROWERS EXCHANGE

Cultivating a heightened awareness of almonds as a high quality, prestigious snack food and ingredient has been the primary goal of the California Almond Growers' overseas marketing efforts, and these efforts have paid off.

Fifteen years ago, Japanese consumers hardly knew what almonds were. Today the average Japanese eats a quarter pound of almonds a year (U.S. per capita is about half a pound). In the last three years alone, Japanese consumption has increased 76 percent.

Early promotional efforts such as participation in food shows and introduction of almonds in cooking schools have since given way to sophisticated campaigns to introduce almonds into everyday life situations via documentaries, talk shows, special events and magazines aimed at the general public.

Industrial food users, perceiving increased consumer demand, have begun to create novel almond products. In the past few years 28 new almond products have been introduced in Japan including almond sausage, soy-flavored almonds, almond tofu, almond spaghetti, products using almond butter, almond cheese bars and almond products soap. Soon to be on the Japanese market is an almond-based medicine which reportedly aids digestion.

But the Japanese market has not yet reached its full potential. With California growers harvesting an excellent 1985 crop on the heels of the record-breaking 1984 crop, plans must be implemented to reach every segment of the market. As part of its effort to absorb this production, the Exchange has set a goal of doubling the already sizable Japanese market by 1990.

### CALIFORNIA AVOCADO COMMISSION

Recent research shows that 89 percent of the Japanese population is aware of avocados . . . a far different picture than 8 years ago when avocados were virtually unknown by all but 5 percent of the population.

The reason for this turnaround lies wholly within the USDA/FAS and California Avocado Commission jointly funded marketing program that began in 1977 with an intensive consumer education program encompassing public relations, advertising, in-store demonstrations and food service. The April 1983 Japanese tariff reduction to 6% on avocados further enhanced importation.

Sales in Japan have increased from a meager 500 million pounds to a 1984-85 total of 4.5 billion pounds. With the consumer education cooperator program geared to new research findings, sales should continue to grow significantly throughout the remaining years of the 1980s.

### CALIFORNIA CLING PEACH ADVISORY BOARD

The California Cling Peach Advisory Board (CCPAB) and two major Japanese dairy companies conducted a joint promotion in Japan in the spring of 1985. Seven hundred supermarkets representing six large chains participated in the promotion, along with over 400 independents and small chains. Weekend demonstrations of the two products were made available to many stores, and dairy companies contributed tickets for free yogurt to many Japanese consumers.

Sales of California canned cling peaches and canned fruit cocktail at the chain level showed increases ranging from 150 to 256 percent. The cross-merchandising of cling peaches and yogurt was so successful that both the chains and dairy companies want to repeat the promotion.

### CALIFORNIA RAISIN ADVISORY BOARD

Promotional activities tied to a cross-country ski meet have helped the California Raisin Advisory Board expand consumption of California raisins in Japan.

Some 1,500 supermarkets and 2,000 bakery retail outlets conducted in-store promotions tied to the event, and sales of consumer-pack raisins in participating stores reached almost 432,000 pounds during the promotion period. Bakery outlets displayed posters and offered literature related to California raisins and increased sales of raisin bread representing about 49,000 pounds of raisins.

This event, in conjunction with other marketing and promotional activities in Japan, has helped to make Japan the largest export market for U.S. raisins, with sales of 22,188 tons in crop year 1984-85, up 32 percent from 1983-84.

### CALIFORNIA TABLE GRAPE COMMISSION

Most exports of table grapes to Panama have occurred during December, when holiday traditions call for fresh grapes. Since consumers seemed to regard grapes as a holiday speciality item, demand during the rest of the year has been low and showed little potential for a significant increase.

In 1985, the CTGC launched a campaign to increase Panamanian demand for U.S. grapes during the fall. Television advertisements, supported by newspaper inserts, were broadcast during September, October and November.

The results were quick and dramatic, with shipments of table grapes ot Panama during the three target months increasing 78 percent over 1984. Total shipments of 1,810 MT set a new record for U.S. grape exports to Panama.

### COTTON COUNCIL INTERNATIONAL

Dubai has become the textile and fashion center for the Middle East since civil strife erupted in Beirut. Seizing an opportunity to promote U.S. fashion and fabric in this area, arrangements were made for the U.S. Maid of Cotton to participate in U.S. cotton textile fashion shows in April, 1985.

Co-sponsored by the Cotton Council International in cooperation with the Dubai Sheraton Hotel and the Blue Ribbon Fashion Boutique (a modern Dubai business specializing in western clothes), the show featured wearable and reasonably priced designs.

The boutique owners reported that demand created by the show exceeded their most optimistic expectations. During the week following the show, their entire stock of show designs was sold. The local news media generated 140 articles covering the show, and the boutique indicated strong interest in participating in any future shows for U.S. cotton textiles.

### FLORIDA DEPARTMENT OF CITRUS

For many years, an import quota and import licenses have restricted market growth and development of Florida grapefruit juice in Japan. Trade negotiations between governments in April, 1984 resulted in lifting the 6,000 MT per year quota and expanded import licenses.

The Florida Department of Citrus seized this opportunity to increase sales of Florida grapefruit juice to Japan. During fiscal year 1984, the department participated in in-store demonstrations and direct consumer advertising, resulting in higher consumer awareness of Florida grapefruit juice. Local manufacturers and brand owners stepped up their advertising and promotional activity using department and FAS funds. Brand owners are currently spending increased funds to develop a strong share of market to head off competitors of grapefruit juice. All of these activities played a strong role in boosting 1984 exports of Florida grapefruit juice in fiscal year 1984 to 1.9 million cartons equivalent, as well as boosting the seasonal six month demand for fresh Florida grapefruit.

### HOLSTEIN-FRIESIAN ASSOCIATION

The Holstein-Friesian Association's ongoing efforts to develop overseas markets for Holstein-Friesian cattle met with significant success in the People's Republic of China and in South America.

In 1985 the United States exported the first U.S. Holsteins to China in over 40 years, through the efforts of the Holstein-Friesian Association of America (HFAA), which has conducted market development activities in China since 1979. The HFAA has conducted technical seminars, brought Chinese dairy study teams to the U.S. and trainees to U.S. Holstein dairy farms, and continued research on potential Chinese demand for dairy genetics. As a result of these efforts, the U.S. has sold to China more than 1,200 Holsteins valued at over $2 million. Sales of U.S. Holstein semen and embryos are expected following successful negotation of Chinese import health regulations.

Increased emphasis on dairy production in Ecuador and Peru has created demand for imports of both dairy cattle and genetics. The HFAA has capitalized on this opportunity to increase exports of U.S. Holsteins to those countries. A U.S. Holstein judge was provided in response to an invitation from the Ecuador National Holstein show, giving HFAA an opportunity to demonstrate Holstein judging techniques and to attain visibility among potential importers. Official Holstein classifiers were sent to both Peru and Ecuador to give local breeders the chance to learn more about evaluation techniques and genetic improvement programs.

As a result, exports of U.S. Holsteins have increased dramatically. During the first six months of 1985, shipments to Ecuador totalled 102 head, compared with 18 head in all of 1984. In Peru, where there have been no sales for the past three years, nearly 1,200 head of cattle valued at $1.6 million were exported from January through June 1985.

### MID-AMERICAN INTERNATIONAL AGRI-TRADE COUNCIL (MIATCO)

The Mid-American International Agri-Trade Council (MIATCO) concentrated its efforts on generating useful market information for the midwestern states that are members of the Council.

In preparing marketing plans and foreign trade missions, MIATCO discovered that little qualitative country market information was available in an easily accessible and usable format. MIATCO created Country Market Profiles for each of the 9 countries in its 1985 marketing plan by drawing on secondary resources and editing the material. These Country Market Profiles were distributed to each of the MIATCO States and to mission participants, providing them with more comprehensive preparation for their market development activities. USDA in Washington is considering adding the profiles to statistical country market information for its trade referral program. State agricultural marketing staffs report this material is usable and helpful.

In an effort to provide more up-to-date market information on high value food products, MIATCO has identified the specific kinds of information needed to enable its constituent states to compete more effectively in the processed food markets of the world. An example of the results is an expanded, comprehensive trip report of its mission to the Middle East which took place in February 1985. The facts provided in the report will form the basis of planning for further market development activities in the Middle East in February and March, 1986 and already are being used to determine which processed food products to promote in the coming year.

MIATCO conducted a trade mission to Korea in June, 1985 after having found that the Hotel Supply Center (HSC) in Korea, a quasi-governmental organization, controls the volume and value of imported processed food products into the country. Meetings were arranged with HSC, as well as other influential members of the hotel trade, and a large Mid-America company seeking to enter the Korean market. The long road of developing relationships was begun and the Mid-America company is optimistic that it will successfully sell several product lines to the Korean hotel trade.

MIATCO conducted a trade mission to Saudi Arabia, Dubai, Kuwait, and Bahrain in February 1985. Golden caviar produced by a small but growing company in Wisconsin was among the products presented at food demonstrations and evaluation. Golden caviar is a new product to the Middle East and was very well received. Since returning from the mission the company has received serious inquiries from Middle East buyers.

### NATIONAL ASSOCIATION OF ANIMAL BREEDERS

The Friesian Association in Argentina proposed new genetic requirements which would severely restrict U.S. semen imports. Analysis of U.S. records disclosed that only 12 U.S. bulls — some of which were dead or otherwise limited in semen availability — could have complied with the requirements, but these bulls' semen prices are substantially higher than Argentine market prices.

An official of the National Association of Animal Breeders (NAAB) went twice to Argentina to work with local semen importers to develop strategy to defeat the proposal and point out the effects of the proposal to the Argentine Friesian Association. Subsequently, the Argentine association resoundingly defeated the proposal, which means that U.S. exporters can continue to make available to Argentine importers a complete selection of U.S. bulls.

### NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE

The second National Food and Agriculture Exposition, sponsored by the National Association of State Departments of Agriculture and the U.S. Department of Agriculture's Foreign Agricultural Service, was held in Kansas City, Mo., April 22–24, 1985.

Exhibitors from 42 states met buyers from 52 nations. Visitor representation was especially strong from Japan, Taiwan, and Korea, making the show a good opportunity for those interested in selling to the Pacific Rim. Among the Far East buyers were contingents from the Japan External Trade Organization, the Taiwan 10th Special Procurement Mission, and a buying team for the 1988 Olympic Games in Seoul, Korea.

Seattle is the site of the third NASDA Exposition, to be held April 29–May 1, 1986. This will give exhibitors a fine opportunity to continue reaching prospective buyers from the rapidly growing Pacific Rim market as well as from many other nations; Seattle exhibitors will "meet the world" without leaving their own country.

## NATIONAL ASSOCIATION OF SWINE RECORDS

Increased competition from other exporting countries and a lack of credible clearinghouse organizations have contributed to declining U.S. swine exports to Mexico, traditionally a solid customer for U.S. breeding stock.

A series of NASR seminars in November, 1984 addressed these specific issues and allowed NASR to make valuable industry contacts and resulted in a June, 1985 shipment of 290 head of Spots, Yorkshires, Hampshires and Durocs by the government of Mexico City.

The NASR has applied the same techniques to other activity countries resulting in increased U.S. swine exports. From January through August, 1985, exports increased 3,456 head over the same period in 1984.

## NATIONAL FOREST PRODUCTS ASSOCIATION

The National Forest Products Association and its member associations have ongoing programs to increase demand for U.S. forest products and generate sales gains in a number of countries. Particularly outstanding were the efforts in the United Kingdom and Denmark.

In early 1985, when the U.S. Air Force accepted bids for approximately 600 homes for its personnel in the United Kingdom, a conflict arose between requirements of the U.S. and British governments.

Congress requires that such houses contain U.S. manufactured components, but British building standards prohibit use of U.S. joinery and structural timber. To resolve this conflict, the U.S. Southern Forest Products and Western Wood Products Associations met with the Property Services (PSA), a British Government body which acts on the behalf of the U.S. government.

The U.S. associations presented the technical specifications for American softwood timber and other softwood products and the conditions under which they should be used. Consequently, the associations were asked to suggest changes in the specifications. As a result, the PSA changed the specifications to the extent that only American timber and home-grown British species were cited for both joinery and structural use. Because of these efforts, and American wood products were used in the construction of the nearly $22 million housing project.

In Denmark, similar steps were taken toward increasing U.S. plywood exports. Danish authorities refused to approve use of the American Plywood Association's CDX grade plywood — the most common U.S. plywood — for "cold roof" construction, even though other grades did receive government approval. This severely limited access of American plywood to the Danish roof market.

APA representatives met with representatives of the Danish Ministry of Housing to provide timely information on the quality of CDX plywood and explain how U.S. builders use it. In 1985 the Danish Government approved 1/2 inch, 5/8 inch, and 3/4 inch CDX plywood, opening the Danish construction market to the many uses for which CDX plywood is suited.

## NATIONAL PEANUT COUNCIL

The National Peanut Council has registered some impressive successes in its continual effort to increase overseas demand for U.S. peanuts. Some of the biggest gains this year were in Europe, particularly Germany and the Netherlands.

Since the opening of NPC's Rotterdam office, market development activities aimed at retailers in the Netherlands have intensified. Contacts have been made with peanut purchasing managers to give them first-hand information on U.S. peanut performance and quality.

As a result, several Dutch retail chains have begun to sepcify U.S.-origin peanuts for their own-label packs, and NPC in cooperation with the Foreign Agricultural Service has begun several U.S.-identified peanut promotions with chain stores. The second largest retail chain in the Netherlands exceeded peanut sales targets by 35 percent after switching to U.S. runner peanuts and identifying their U.S. origin on the pack.

U.S. exports of shelled peanuts to Holland increased 19 percent in marketing year 1984-85 to 55,000 MT (shelled basis) as Dutch processors were obliged to switch to U.S. peanuts from other orgins to meet consumer demands in this quality conscious market.

In Germany, progress has been slowed by German retailers' reluctance to feature American peanuts and their limitation of the marketing term to the fall and pre-Christmas period continue to hamper sales growth. Major promotional campaigns were needed to persuade retailers to feature American peanuts and to expand the marketing period.

Working with two leading inshell roasters in Germany, NPC developed aggressive promotional campaigns which featured clear package markings for American orgin. NPC encouraged the roasters to ask Germany's largest retailer to use high-quality U.S. inshells for the first time and to consider expanding the marketing period over the entire year.

The retailers not only agreed to extend the marketing period, but German inshell imports expanded nearly 40 percent to 14,252 MT. Of that increase, 75 percent was American origin.

Throughout Europe, the NPC has had great success identifying and working with leading European peanut marketing companies since 1977, it has been unable to deliver high-level technical support to customers except through visits to the U.S. by individual companies or individual shellers' efforts.

To fill this gap, NPA organized seminars in London and Rotterdam to share technical data and quality assurance techniques with European peanut processors. Over 100 European technical managers attended.

Although NPC was gratified by the very positive response of those attending, the most important result was that NPC was able to learn more about European manufacturer's quality concerns, and to solidify European confidence that U.S. peanut producers and exporters will support European customers after the sale as well as before.

All of these efforts owe some of their success to the NPC's decision to open a European office in Rotterdam this past year.

Because of increased competitive pressure from China and Argentina, the NPC realized it needed to increase direct contact with European decision-makers in the peanut business: buyers, traders, marketing directors, production managers and quality assurance experts. NPC also felt on-scene administration of its European projects would maximize its effectiveness.

NPC opened a European office in Rotterdam, locating with U.S. Wheat Associates in order to limit initial investments and start-up time. Rotterdam, the largest peanut port-of-entry in the world, is centrally located in Europe for easy access to many customers representing over 75 percent of European peanut trade.

In the 15 months since the office opened, over 300 visits were made in seventeen countries to companies representing over ninety percent of Europe's peanut trade. Calendar year 1984 sales of U.S. peanuts increased significantly to the Netherlands, Germany, the United Kingdom and other countries despite the strong U.S. dollar and a tough competitive environment. Total U.S. peanut exports to the European Community from August, 1984 through July 1985 rose nearly 21 percent from 136,960 MT to 165,162 MT.

## NATIONAL POTATO PROMOTION BOARD

The National Potato Promotion Board, in cooperation with the U.S. Department of Agriculture's Foreign Agricultural Service, has been expanding sales of U.S. potatoes and potato products in Japan through a comprehensive promotion program.

Designed to develop more retail markets and gain more food service customers, recent activities include trade and consumer advertising, cooking classes for homemakers, an exhibit in the Harumi Institutional Food Show and food demonstrations held in supermarkets.

U.S. exports of frozen french fries to Japan increased from 14,874 MT in 1978 to 39,081 MT in 1983, with the U.S. market share doubling to 48 percent. Estimates indicate that the market potential for frozen potato products could double within five years.

## NATIONAL RENDERERS ASSOCIATION

The National Renderers Association's success in generating additional demand for its products ranged from the Far East to Europe. The diverse products which enjoyed additional sales due to NRA's efforts include edible tallow, meat and bone meal, toilet soap, lime-dispersing laundry soap and "dry" fat products.

In the Far East, managers and technicians in bakeries and instant noodle factories in Taiwan, Hong Kong and Korea were unaware of the outstanding characteristics of edible tallow for use in shortenings for frying and that tallow is often less expensive than the palm oil usually employed for baking and frying.

To change this, the National Renderers Association, Inc. (NRA) conducted educational programs in Hong Kong, Korea, and Thailand from 1983 through 1985 on the uses of edible tallow. As a result of these activities, which included in-plant demonstrations by U.S. consultants, and an Asian food producers team visit to the United States, many of these users switched to U.S. tallow when palm oil prices greatly increased in 1984.

In Korea along, tallow imports for food use increased 65 percent from 36,493 MT in 1983 to 60,300 MT in 1984, valued at an estimated $6.9 million for U.S. exporters. Moreover, when prices equalized the majority of users continued to use U.S. tallow rather than return to palm oil.

In Taiwan, a few shipments of adulterated protein meals in the early 1980s to feed millers adversely affected the ability of most responsible U.S. suppliers to sell meat-and-bone meal (MBM) to Taiwan. To counteract the situation, the NRA began frequent contact with Taiwanese government officials, feed millers, importers and poultry producers and followed up with systematic distribution of technical literature on the nutritional values and proper handling of good quality U.S. MBM. These efforts helped increase U.S. MBM exports 58 percent from 1983 to 1985, reaching a record 97,236 MT tons with a total f.o.b. value exceeding $23 million.

In Korea, the NRA has co-sponsored a hand-washing campaign in Korea in cooperation with the Korea Soap Industrial Cooperative, Inc., and the Korean Ministry of Health and Social Affairs since 1980. Over 90 Korean schools apply annually to participate in this campaign, designed to promote the hygienic benefits of the regular use of toilet soap among Korea's primary school children. Of the 90 schools, 30 are chosen which represent a cross-section of over 10,500 Korean students. Over the past 4 years, sufficiently to raise Korea's total production to 25,677 MT in 1984, up 33.8 percent from 19,192 MT in 1980. This increased soap production has prompted a 21.4 percent rise in Korean tallow imports since 1980 to 174,234 MT, of which 55.6 percent or 98,605 MT came from the United States.

Over the last decade, USDA and NRA conducted research to develop an agent to improve the performance of lime dispersing laundry soap (LSDA) to compete with the synthetic detergents that have almost entirely replaced natural laundry soaps. In spite of the development of a good product, the future of LSDA appeared relatively dim because of the absence of laundry soap production in the U.S. Then, the NRA European office recognized a market opportunity for the product in Europe and Africa.

NRA's history of LSDA promotion dates back to 1976 when a major seminar was held in Montreaux, Switzerland. But, little was heard of LSDA for several years, until a French company took the information gained at Montreaux, further perfected the product, and made a multi-million dollar investment in LSDA and a finished laundry soap facility.

In 1984, the European office of NRA began an aggessive promotion of LSDA with the help of the French company, conducting seminars in Egypt and Turkey. Early in 1985, an international symposium was organized in Marseille by NRA that attracted participants from 21 countries.

Among the most interested participants were the Chinese, who subsequently ordered a 15,000 ton methyl esterification and sulphonation plant expected to be in operation in 1986. Tallow will be used not only in the LSDA compound and tallow laundry soap but also in most major detergents, which will represent a major additional market.

A Portugese company has ordered a similar plant and serious inquiries for technical tie-ups have come from major soap companies in Turkey, Egypt and Greece.

For years, getting a high level of energy into modern high-producing dairy cows has been a dilemma to nutritionists and animal livestock managers. The use of high energy fat is, of course, a very effective method, but high levels of fat can cause serious interference in the rumen, preventing utilization of the energy.

While "protected" or dry fat products are not new, a British company recently developed a high fat content hard pellet consisting of 85% fat and 15% calcium, with palm oil as the energy ingredient.

NRA's Eruopean office embarked on a campaign of convincing the company to use tallow instead of palm oil and broaden use of the product. Research trials and practical use have shown excellent results and a broad-based market is foreseen in Europe, the Middle East and Northern Africa. Cost factors will make use of tallow particularly feasible in the developing markets and preliminary research demonstrates that tallow brings about better results than palm oil.

A major mew use of tallow is in the making that has potential not only for use with dairy cattle, but also for beef cattle and swine which can affect the export of U.S. tallow to various areas of the world.

## NATIONAL SUNFLOWER ASSOCIATION

The National Sunflower Association's recent activities included successful efforts in the United Kingdom and Costa Rica.

In the United Kingdom, consumers were not aware of how sunflower kernels could be used as a snack food. To change this, NBA and a U.K. gourmet nut company sponsored a promotional campaign in mid-1985, using pamphlets and magazine advertisements. The result was a 25-percent increase in confection sunflower sales.

In Costa Rica, lack of familiarity with sunflower oil hampered market development efforts, since oil was initially introduced in 1982. Since then, NSA has returned to Costa Rica each year with market information and technical assistance designed to facilitate processing and marketing of sunflower oil. Sales have jumped to commercial-scale volume in just two years as a result of this effort.

## NORTHWEST HORTICULTURAL COUNCIL

The Washington state Apple Ambassador has been a familiar sight to the ten-year-old-and-younger set in Hong Kong and Taiwan. But when in early March 1985 it became apparent that the Washington supply of Golden Delicious apples was very large, a very intense and direct selling approach to selling Golden Delicious apples was clearly in order.

Taiwan, as one of the few countries overseas importing Golden Delicious apples as well as Red Delicious apples, seemed a logical market to concentrate upon, and so an addition was made to the Apple Ambassador.

The Golden Little Brother, a slightly smaller, golden-colored apple with a "person" inside, was introduced at a major supermarket chain promotion in Taipei. The Golden Little Brother was also immediately adopted by the consumer. By the first part of June demand for Golden Delicious apples had increased enough to absorb the surplus.

## LEATHER INDUSTRIES OF AMERICA

In May, 1984, the Leather Industries of America sponsored a leather industry team to Taipei for discussions with representatives of both the Taiwanese government and industry. The discussions with trade association representatives centered on efforts to encourage the government to lower excessive trade barriers. U.S. representatives expressed their concerns over high tariffs, valuation uplift expenses, and the assessment on samples, and explained that easing market access for U.S. leather would enable Taiwanese leather goods manufacturers to be more competitive in world markets. As a result of these efforts, the Taiwanese government unilaterally reduced tariffs on bovine, equine, wet blue and crust leathers — a $27 million per year market — from 35 to 20 percent.

The Brazilian leather goods industry has grown at a phenomenal rate and currently is Brazil's most significant source for earning foreign exchange. The Brazilian government is committed to continuing to support this industry, despite a shortage of semi-finished leathers. As a result of two trade team visits sponsored by the Leather Industries of America, Brazil imported leather valued at $7.5 million from the United States in the first eight months of 1984, up from less than $0.2 million during the same period in 1983. Exports of wet blue leather to Brazil totalled 215,000 pieces and commitments booked for the rest of 1984 were more than 90,000 pieces.

## PROTEIN GRAIN PRODUCTS INTERNATIONAL

As a part of its market development effort, PGPI is continually seeking new markets for specially formulated blended and fortified grain products.

Little was known about the market potential of North Africa, so PGPI hired a Middle Eastern firm to conduct a study of Algeria, Morocco, and Tunisia. Meetings were held subsequently to assess the market potential.

The concept of processed grain products was well received in all three countries. Officials in Algeria and Morocco were particularly impressed with wheat-soy milk (WSM) for use as a wheat-based infant food for lower- and middle-income families. Product samples were made available for testing purposes and additional discussions were held with appropriate government officials.

Because of the interest expressed PGPI has included two follow-up activities in its FY1986 Marketing Plan.

## RICE COUNCIL FOR MARKET DEVELOPMENT

Changing people's eating habits by introducing a new food into a nation's diet is a difficult and long-term task. However, the benefits are substantial and usually long lasting.

In France, the Rice Council's programs combining a consistent, well executed public information effort and brand incentive advertising activity in conjunction with local marketers of U.S. rice, stressing the high quality of U.S. rice have helped increase the U.S. share of the French rice market from 17 to 34 percent over the last decade.

U.S. rice exports to France have tripled since 1974 and potential exists for continued growth. France wants food and recipes from other countries. In 1983, the Rice Council sponsored a visit by five magazine food editors to the U.S. During 1984, every French editor in the delegation wrote at least one major story about U.S. rice, with recipes and color photographs.

U.S. rice sales to the 10 member European Community (EC) increased by 4 percent to 310,178 MT during the twelve months ending July 1985 versus the same August-July period a year earlier — an impressive gain in view of stiff competition from Thailand (which sells prices at half what the U.S. charges), the strong dollar, and discriminatory treatment.

Considering these restraints to trade, the U.S. rice industry must feel fortunate just to maintain, let alone increase, sales volume. Strong trade ties have resulted from a variety of long-term activities. These promotional programs have built a superior quality image for U.S. rice. A special Brand Incentive Program has even allowed European companies to promote their own brands of U.S. rice.

Implementing Rice Council promotional programs in Europe has been a long range effort. But, during times of adversity, the enormous rewards that continue to be reaped more than justify the efforts and costs.

## SUNKIST ORANGES

During the 1984-85 season Japan's quota for oranges was increased, and the outlook for orange exports seemed promising. The California-Arizona citrus industry, however, had a crop of relatively small oranges, and the Japanese trader and consumer usually prefer larger fruit, associating size with quality.

Sunkist turned this challenge into an opportunity by starting advertising and promotion programs to encourage Japanese consumers to purchase small oranges for juice in the western-style breakfasts many consumers now perfer.

In addition, Sunkist was able to extend the promotion of small oranges into the fast food industry through a joint promotion with Kentucky Fried Chicken. As a result, Sunkist sales of oranges in Japan during the 1984–85 season increased to 3,250,000 cartons from 2,422,000 cartons during the prior season.

## SUN WORLD

For several years, Sun World has concentrated promotion and advertising dollars in Singapore, where the market has been excellent. However, the Singapore market is now greatly reduced due to a surcharge, which restricts the movement of fruit through Singapore to third countries.

After a marketing trip to Malaysia, Sun World was convinced a strong advertising program promoting U.S. citrus would be necessary to penetrate this market and circumvent the reduction of citrus movement by Singapore agents. A program with media advertising; point of sale materials; printed calendars; T-shirts; imprinted shopping bags with the American flag and U.S. brand names not only reached top importers, but also hundreds of thousands of consumers, establishing an awareness and preference for U.S. fruit.

Sun World's sales have increased considerably and we look to this new market with enthusiasm.

## SOUTHERN U.S. TRADE ASSOCIATION (SUSTA)

Although exporting from the U.S. was made difficult by the strong dollar, many overseas sales resulted from Southern U.S. Trade Association export promotion activities. The most successful of these activities was the visit of SUSTA forest products sales team to Spain and Italy, which resulted in over $250,000 of immediate sales, and projected sales of $2 million through 1985.

Nearly a full container of a southern sauce product was sold after the company participated with SUSTA at the Saudifood exhibition in Riyadh, Saudi Arabia. Similar sales have resulted for companies which participated with SUSTA in other international food exhibits.

SUSTA's recent emphasis on point-of-sale (P.O.S.) promotion has also chalked up several sales for SUSTA area companies. While developing a P.O.S. promotion at Harrods of London for FY86, several area companies including a southern candy manufacturer have signed agency agreements with the United Kingdom.

### THE NATIONAL HAY ASSOCIATION INC.

In October, 1982, the National Hay Association and the Western United States Trade Association (WUSATA) co-sponsored an alfalfa trade mission to Japan.

A display of Oregon grass straw samples was included in the National Hay display booth. Visiting trading companies showed high interest when attending the hay displays and reception.

The result was increased Japanese purchases of Oregon grass straw: from approximately 2,000 MT in 1982 to more than 35,000 MT in 1985. The increased imports are displacing some previous Japanese purchases of grass straws from Taiwan.

### TOBACCO ASSOCIATES

Joint advertising programs by the export promotion organizations representing U.S. tobacco producers led to such an increase in demand for American blended type cigarettes that Egypt experienced severe cigarette shortages.

Working with the U.S. agricultural attache, leaf merchants, the cigarette trade and others, Tobacco Associates developed a strategy to inform Egyptian government officials and local cigarette executives of available USDA financing.

Egyptian cigarette industry team visits to the U.S. provided an in-depth understanding of the U.S. tobacco industry and available credit programs. Following the most recent visit, the Egyptians announced their intent to purchase $75 million worth of U.S. tobacco and to request USDA credit guarantees for the same amount, a significant increase over their 1984 purchases.

### USA DRY PEA AND LENTIL COUNCIL

India currently is the largest importer of U.S. dry edible peas, accounting for 24 percent of total exports, but market growth has been restricted by competition from Canada, Australia, and New Zealand, lack of product awareness, and lack of market distribution and product identification.

To overcome these constraints, USADPC has conducted seminars, engaged in trade advertising, and held product use demonstrations to show the superior quality of U.S. peas. In addition, a product identification campaign is now underway to stimulate retail size packaging.

Shipments in 1984-85 increased 37 percent over the previous marketing year, to 27,714 MT valued at $8.3 million. Since pulses were placed under open general license by the Indian Government in 1978, this market has shown continuous growth and both U.S. exporters and Indian importers think this market will continue to grow if prices remain competitive and market devleopment work is continued.

### USA POULTRY AND EGG EXPORT COUNCIL

In November 1984, USAPEEC joined McDonald's for a joint promotion in Hong Kong, Kowloon Peninsula and the New Territories. The campaign was designed to introduce to the Hong Kong consumer McDonald's breakfast items which feature U.S. eggs, including Egg McMuffin, Sausage McMuffin with egg, Big Breakfast, and Hot Cakes and Eggs.

USAPEEC worked closely with the McDonald's management and advertising agency in developing the complete program, which ran in November and December of 1984. Activities included point-of-sale materials and television commercials specifically promoting U.S. Grade A eggs, and during this period 1,948,251 pieces of U.S. eggs were sold.

McDonald's managers in Hong Kong say the promotion was their most successful introduction of a new product. The introduction to Hong Kong of a new way and time of day to eat eggs has created a new market for U.S. eggs and has successfully created an image of U.S. eggs as a high-quality, high-protein food at a low price.

### U.S. FEED GRAINS COUNCIL

The U.S. Feed Grains Council's continuing efforts to generate new demand for U.S. corn, sorghum and barley met with success in a wide range of countries, including Nigeria, Korea, Japan and Venezuela.

In addition to the problems caused by the strong U.S. dollar and subsidized competition, U.S. exporters often experience difficulties in establishing trade relations with developing countries. Using contacts developed through the cooperative effort of USFGC and the Agricultural Trade Office in Lagos, a U.S. trading company was able to establish a working relationship with Nigerian feed manufacturers, its poultry association, and its grain board. This resulted in an initial sale to Nigeria of 90,000 bushels of U.S. corn and 4,000 bushels of soybean meal. The company has now sold a total of 50,000 MT of U.S. feed grains, and projects its sales at $50 million, with exports of 50,000 MT of U.S. corn alone.

Korea lacked the technology needed to improve swine production and increase per capita red meat consumption. By providing a series of comprehensive consultations, seminars and technology exchanges on the development of an effective swine testing program, the USFGC assisted the Korean Swine Association in establishing the first national swine testing station in Korea. The station held monthly auctions of tested pigs, with an average price about $630 per pig compared with the untested pig market price of $400. This expanding swine industry has led to an increase in feed grains use from 201,000 MT at the start of the program in 1977 to 1.255 MMT in 1985. Approximately 90 percent of the feed grains used for the program during this period was imported from the U.S., at a value of about $777 million.

Through coordinated use of its overseas and domestic market development team, the USFGC began an intense education program aimed at demonstrating a least-cost ration formula that would provide for use of alternative feed grains within certain pricing and nutrition parameters. Foreign feed grains buyers were encouraged to use a least-cost ration formula in determining their purchasing needs using information from the USFGC programs. Because sorghum is a price-sensitive commodity, it was readily substituted in two significant markets, Japan and Venezuela. U.S. sorghum exports to Japan in the first 11 months of the 1984-85 marketing year increased from 1.5 to 2.2 MMT. In Venezuela, the increase has been even more substantial: from 137,000 to 745,000 MT. Total U.S. sorghum exports in 1984-85 were 7.3 MMT, compared with 6.2 MMT in 1983-84.

In Venezuela, the Venezuelan Agricultural Credit Fund, private milk companies and producer organizations agreed early in FY85 to participate in a long-term dairy development program jointly conducted by six market development cooperators. Coordinated by the USFGC and co-sponsored by the American Soybean Association, National Renderers Association, Brown Swiss Cattle Association, National Association of Animal Breeders and the Holstein-Friesian Association of America, this approach to market development has enabled cooperators to obtain maximum benefits. Technical seminars were conducted quarterly on selected dairy farms in different areas of the country, with topics selected by an agreement of FAS and in-country groups. Programs and practical demonstrations have led to nutrition, reproduction, sanitation, and farm management improvements on four demonstration farms. One result of this innovative program is that Venezuela now requires about 400,000 MT of additional feed grains annually.

### U.S. MEAT EXPORT FEDERATION

Successful activities were conducted by the U.S. Meat Export Federation in a number of countries including France, the United Kingdom, Mexico and Japan.

USMEF undertook a series of activities to rebuild the market for U.S. variety meats in the European Community following several years of declining sales. Color brochures and purchasing guides on U.S. variety meats were distributed to European comsumers and the meat trade. Special advertising was featured prominently in the United Kingdom's leading meat trade publication, which is circulated to more than 12,000 readers, and information on U.S. variety meats and potential suppliers was circulated through USMEF's quarterly newsletter for the European and Middle East meat trades. In-store pormotions and trade seminars featuring variety meats were conducted, as well as a research project on the French market for imported variety meats.

As a result of these actions, U.S. variety meat sales to the EC during the first 6 months of 1985 totalled more than $42 million, an increase of 13 percent over the same period during the previous year.

Mexico is the fourth leading importer of U.S. variety meats, but the country's complicated import system represents a real danger for U.S. efforts to maintain market share. USMEF appointed a consultant in Mexico City to monitor the variety meat import situation, and undertook activities to maintain the Mexican market. Activities conducted during FY85 included trade servicing trips by USMEF members, a multi-lingual purchasing guide, a Mexican industry delegation visit to the United States to inspect U.S. production and meat packing facilities, and a variety meats tasting luncheon for major importers, retailers and hotel/restaurant representatives in Mexico City.

As a result of those activities, Mexico has increased its imports of U.S. variety meats. During the first 6 months of 1985, Mexico imported $17.4 million of beef and $4.9 million of pork variety meats, an increase of 92 and 125 percent respectively, over the same period in 1984.

USMEF has continued its efforts to increase the sale of U.S. high quality beef to Japan. USMEF's Tokyo office has completed an in-depth study of Japan's beef and pork production, import and distribution systems. The study is one of the few English-language studies available and has been distributed to the U.S. trade. USMEF also has succeeded in developing an import bidding system that allows U.S. exporters direct access to Japanese end-users to 10 percent of Japan's beef import quota.

A test case for further liberalization of Japan's market, the U.S. received a 62, 59 and 70 percent share respectively on the first simulateneous buy-sell tenders. These programs along with increased consumer capabilities in USMEF's Tokyo office, the translation and use of the Meat Nutrifacts program, technical meat seminars and continued trade servicing have continued to an 11 percent increase in U.S. beef sales to Japan during the first 10 months of 1985. During the January-October period, the U.S. exported $303.2 million of beef and veal to Japan.

### U.S. WHEAT ASSOCIATES

Maintaining markets is just as vital as developing new markets in U.S. Wheat Associates' overall scheme of export promotion. The following are just a few examples of the importance of market maintenance.

In 1983, virtually the entire western white (WW) wheat crop in the Pacific Northwest was affected by an unusual sprout damage problem. Very little sprout damage is acceptable to Japanese users, and when the problem with the 1983 crop was discovered, the Japanese milling industry was sufficiently concerned to ask its government's food agency to restrict imports of U.S. WW and increase imports from Australia.

To counter this, USW brought a team of Food Agency officials and flour millers to visit the United States to discuss the problem with producers, exporters, and USDA officials and seek their cooperation in finding a solution. As a direct result of this activity, and the consequent full understanding of the problem by the U.S. wheat industry, every effort was made to locate and ship the best possible WW available.

At the same time, USW representatives in Tokyo and the American Embassy maintained a constant dialogue with the Food Agency and millers and helped assure the Japanese that the United States was genuinely concerned. As a result, Japanese millers did everything possible to utilize the sprout-damaged 1983 WW crop until 1984 crop wheat became available. It is hard to say precisely how much market this saved, but given the fact that the Japanese food agency's WW purchases — usually about 1 MMT annually — were down only about 60,000 MT in the 12-month period following the 1983 WW harvest, it is quite safe to assume that a minimum of 100,000 MT was saved, and possibly as much as 200,000 to 300,000 tons.

In late 1984, Jordan, which was undergoing severe economic problems, reduced purchases of U.S. wheat because of wheat shipments from Argentina, Uruguay, the EC and Yugoslavia at prices far below those of the U.S., as well as severe economic problems. In an effort to maintain this market, USW invited a high level trade team from the Jordanian Ministry of Supply to the United States to meet with grain exporters and with USDA representatives to discuss grain inspection and the availability of credit. Consequently, a tender for 50,000 MT of U.S. wheat was made, and Jordan, continuing its traditional purchasing pattern, is expected to import an additional 400,000 MT of wheat from the U.S. in 1985.

In early 1985, the Taiwan government's plan to sign a long-term agreement with Uruguay to import nearly 70,000 MT of wheat threatened U.S. wheat sales to that country. USW took advantage of its close working relationship with the wheat industry in Taiwan, developed over many years of market development cooperation, to dissuade the government from signing the agreement. The good will developed with the Taiwan flour millers has apparently paid off; the agreement which was to have been signed in February or March of this year was not signed, and the U.S. share of the Taiwan wheat market has been preserved.

### WINE INSTITUTE

The initiation of a strong promotional/educational program on behalf of California wines in the targeted markets of Japan, United Kingdom, Hong Kong and Singapore has made a difference in the sales of these wines even though the strong U.S. dollar has hampered real growth in many foreign markets.

Japan's imports of California wines more than tripled in the first six months of 1985, making that country the second largest non-U.S. market for California wines. This tremendous increase is directly attributable to U.S. promotional efforts in Japan.

The program, run by a locally hired coordinator, emphasizes the quality and value of California wines through educational tastings and seminars, constant contact with the media and the dissemination of point-of-sale materials in the Japanese language to trade and consumer alike.

The effect of the high dollar was most evident in the United Kingdom, where sales have dropped slightly. A shoring up of this decline is seen through the newly instituted educational and promotional efforts in behalf of California wines launched by a week of very successful wine events in April 1985 resulting in over 35 articles in trade and consumer press.

Sales in Hong Kong and Singapore were buoyed by the introduction of promotional efforts in those markets, and resulted in an increase of 3.1 percent in Singapore and 0.3 percent in Hong Kong. This was real growth in markets where price pays a vital role in overall sales.

Continuous work on behalf of California wines in Canada through the efforts of U.S. Agricultural Counselor, Ottawa and the Society for American Wines resulted in the sale of wine by credit card for the first time ever in British Columbia and encourages continuous pressure on provincial Liquor Control Boards to increase listings and increase sales of these wines.

### U.S. BEEF BREEDS COUNCIL

Through the promotional activities of the USBBC and its affiliates, exports of U.S. cattle increased from 6,425 head valued at $6.6 million during January-August 1984 to 23,706 during the same period in 1985, valued at $26.6 million. Mexico was by far the leading market for U.S. Brangus cattle, with 1985 imports valued at an estimated $1.5 million.

Substantial sales gains also were experienced in other markets. Through the promotional efforts of the American Polled Hereford Association, Australia has grown from a closed market to the second largest export market for U.S. beef cattle and genetics, with 80 live cattle purchased to date in 1985, at an average price of $10,000 per head.

Brahman, Brangus, Beefmaster, Hereford, Polled Hereford and Santa Gertrudis Associations have conducted international marketing activities in Mexico and Central America, generating sales and interest that promise considerable future sales potential.

### WESTERN U.S. AGRICULTURAL TRADE ASSOCIATION

Western U.S. Agricultural Trade Association, which represents 11 western states plus Guam and American Samoa, participated in a number of activities in 1985 that laid the groundwork for increased demand for products from this area. These activities included successful efforts in Malaysia, southeast Asia, Japan, Canada and Mexico.

A two-week "Wild West Bonanza" promotion of foods from the western U.S. was held in seven stores of a major Malaysian supermarket chain. The chain bought more than $150,000 in produce for the promotion, and followup orders were placed afterwards. Fresh fruit, ice cream, canned fruit and vegetables, and cake mixes were particularly popular. In some supermarkets, sales volume jumped 20 percent during the promotion.

Elsewhere in southeast Asia, WUSATA helped a company that was new to exporting introduce its products to buyers in Hong Kong, Singapore and Malaysia. The company completed two ice cream sales worth $40,000, and began long-term arrangements to supply those products on a continuing basis to foreign buyers.

From Japan, a buyer contacted WUSATA to find new snack foods. WUSATA delivered samples, product and ingredient information from a western U.S. meat company to the buyer, who now is arranging to purchase the products.

In Canada, WUSATA identified new lamb production areas in the western U.S. as potential new supply sources for a Canadian packing plant. Subsequent lamb sales from the western U.S. to this plant exceeded 18,000 head worth more than $1 million — a 50 percent increase over 1983 sales.

In Japan, WUSATA worked with a Japanese firm to evaluate processed food products. Japanese food distribution executives provided western U.S. food companies with advice on strengths and weaknesses of U.S. products for the Japanese markets. Product modifications and sales will result from these evaluation of 80 products from 60 suppliers.

A WUSATA team of sheep producers went to Mexico in 1984 to evaluate that country's potential as a market for U.S. slaughter sheep and breeding stock. Contacts made during that survey resulted in the sale of 18,000 slaughter ewes from the western U.S. to Mexico, with prospects for additional sales of 50,000 head. This increased Mexican demand also has raised prices for slaughter ewes from 10 to 25 cents a pound.

#### MEMBERS

American Angus Association
American Brahman Breeders Association
American Hereford Association
American International Charolais Association
American Jersey Cattle Club
American Legend Cooperative Mink
American Polled Hereford Association
American Quarter Horse Association
American Seed Trade Association, Inc.
American Soybean Association
Appaloosa Horse Club, Inc.
Beefmaster Breeders International
Brown Swiss Cattle Breeders Association, Inc.
California Almond Growers Exchange
California Avocado Commission
California Cling Peach Advisory Board
California Kiwifruit Commission
California Pistachio Commission
California Raisin Advisory Board
California Table Grape Commission
Cotton Council International
Dairy Society International
Eastern U.S. Agricultural & Food Export Council, Inc.
Florida Department of Citrus
Florida Nuserymen and Growers Association, Inc.
Holstein-Friesian Association of America
International Brangus Breeders Association
Leather Industries of America
Livestock Exporters' Association
Mid-American International Agri-Trade Council
Millers' National Federation
Mohair Council of America
National Association of Animal Breeders
National Association of State Departments of Agriculture
National Association of Swine Records
National Cottonseed Products Association
National Forest Products Association
National Peanut Council
National Pecan Marketing Council
National Potato Promotion Board
National Renderers Association, Inc.
National Sunflower Association
North American Blueberry Council
Northwest Horticultural Council
Ocean Spray Cranberries, Inc.
Papaya Administrative Committee
Protein Grain Products International
Puregold, Inc.
Rice Council for Market Development
Rio Del Mar Foods, Inc.
Santa Gertrudis Breeders International
Seald-Sweet Growers, Inc.
Southern U.S. Trade Association
Sun-Diamond Growers of California
Sunkist Growers, Inc.
Sun World International
The National Hay Association, Inc.
Tobacco Associates, Inc.
USA Dry Pea & Lentil Council
USA Poultry & Egg Export Council
U.S. Beef Breeds Council
U.S. Feed Grains Council
U.S. Meat Export Federation
U.S. Wheat Associates, Inc.
Western Growers Association
Western U.S. Agricultural Trade Association
Wine Institute

## NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

### STATEMENT OF DR. JIM OZBUN, DEAN, COLLEGE OF AGRICULTURE, WASHINGTON STATE UNIVERSITY

ACCOMPANIED BY:

ARNETT BATES, SCHOOL OF FOREST RESOURCES AND CONSERVATION, UNIVERSITY OF FLORIDA

MORT NEWMAN, ASSOCIATION OF 1890 RESEARCH DIRECTORS

LAWRENCE CARTER, EXTENSION ADMINISTRATORS FROM 1890 INSTITUTIONS

ROBERT CROM, ECOP BUDGET SUBCOMMITTEE

PETE DEWHIRST, CHAIRMAN, 1987 BUDGET FOR ESCOP

DONNA BETH DOWNER, COMMISSION ON HOME ECONOMICS

Senator COCHRAN. Our next witness is Dr. Jim Ozbun, who is dean of the College of Agriculture at Washington State University. He is representing the National Association of State Universities and Land-Grant Colleges.

Dr. Ozbun, welcome to the hearing of our committee. You may feel free to introduce your colleagues who are accompanying you today. We would like to have their names for our hearing record. Or let them introduce themselves, however you would like to do it.

Dr. OZBUN. Thank you. Why do we not let them introduce themselves and then we will get on with the testimony.

Senator COCHRAN. All right, why do we not start down at this end, and please just identify yourself for the record.

Dr. BATES. My name is Arnett Bates. I am the director of the School of Forest Resources and Conservation at the University of Florida.

Dr. NEWMAN. I am Mort Newman from the University of Maryland, Eastern Shore, representing the Association of 1890 Research Directors.

Dr. CARTER. I am Lawrence Carter, administrator from Florida A&M University, extension administrator, and I am representing the Extension administrators from 1890 Institutions.

Dr. CROM. I am Robert Crom, director of Cooperative Extension Service of Iowa representing the ECOP budget subcommittee.

Dr. DEWHIRST. I am Pete Dewhirst, director of the Arizona Agricultural Experiment Station and chairman of the 1987 budget for ESCOP.

Dr. DOWNER. I am Donna Beth Downer, dean of the School of Home Economics at the University of Alabama, representing the Commission on Home Economics.

Dr. OZBUN. Thanks for giving us an opportunity to get everyone introduced.

Mr. Chairman, on behalf of the Division of Agriculture of the National Association of State Universities and Land-Grant Colleges, we appreciate the opportunity to present this testimony this afternoon. We wish that the circumstances were more positive; however, we feel that the administration's budget is short-sighted and, in fact, counterproductive.

You have met the members of the fiscal year 1987 budget committee. They are here with me. They have all filed testimony with your committee, and so you have their reports at this time. And they are available to respond to specific questions that you might have.

In addition to the testimony that we have filed here this afternoon, we have provided you with a comprehensive document. I think you have seen this document outlining the programs that we have put together for the 1987 budget. I will not dwell on that document, but rather would like to spend some time discussing the system that we have, the importance of this system, and the implications of the proposed budget relative to this system.

The essence of our recommendations is to maintain the responsiveness and the service capacity of Extension, the experiment stations, and the colleges of agriculture to meet the crisis in agriculture and rural America, and to put agriculture in a position that it can regain its economic viability. This, we feel, is a fundamental national need.

In essence, our recommendations are to increase base programs—Hatch, Smith-Lever, McIntire-Stennis, Animal Health Research Section 1433, and the 1890 Research and Extension budgets by 5 percent over the 1985 budget. This is not really an increase in budget, but rather it provides an opportunity for us to carry on our existing level of programs—programs that are already significantly underfunded.

Further, we request the restoration of the national Special Grants Research programs, the Extension 3(d) items and the Graduate Fellowship Program. This program has already shown some progress toward restoring the human capital base for our agricultural system.

Finally, we have three special supplemental areas that we are recommending for funding: farm financial management, which is designed to improve our agricultural competitiveness; enhanced nutrition, human nutrition; and water quality and management. The details, again, are included in our report that we have provided.

Clearly, it is not necessary for us to list the problems facing farmers, families, and communities in rural areas. These you know only too well. Our concern, however, is that the proposed budget fails to address these issues and seriously compromises the capacity of the land-grant university to deal with these problems.

Rural America has been short-changed by many Federal programs over the years, and the accumulated impact of this can be documented by human tragedy in rural America today.

### EFFECTIVENESS OF EXTENSION SERVICE UNDER BUDGET CONSTRAINTS

Cooperative Extension is the sole institution that has offices in all rural counties across this country. In spite of reduced budgets, this organization has been able to initiate many new, imaginative, and proactive programs, oftentimes cooperative with other State and Federal agencies.

These programs, and some of the successes of these programs were recently highlighted in a forum sponsored by the National Institute of

Mental Health and the Council of State Governments. This forum was titled "Personal Stress Problems of Farmers and Rural Americans." It not only outlined some of the successes, but it further pointed out that the current budgets were certainly not adequate to address many of the problems in rural America today.

Let me cite two specific examples. Teen suicides and attempted suicides in rural America are twice that of the national average. Also, the displaced farmers and others in rural America today, even after 3 or 4 years, have not yet been able to adjust to this situation that they find themselves in.

We feel that the proposed budget is insensitive to these issues and, in fact, that the suggestion that cooperative extension concentrate on production agriculture is ill-advised.

In spite of the crisis situation that we find ourselves in, we think that we must look forward to additional programs in areas such as developing technology to reduce cost of production and the changing market situation that we find ourselves in.

One example of a market change that we have not been able to address and, in fact, that the budget does not attempt to address, is the discontinuation of the aquaculture problem. This is in spite of the fact that as we look at the food consumption in the next decade, fish will be one of the major market growth items. Our seas cannot handle this, but farmers could handle it, and a good example is the catfish program in the State of Mississippi.

These cuts will also make it impossible for us to move ahead with some high priority areas, such as water quality, pesticides, and so on.

Mr. Chairman, with your permission, I would like to include the remainder of my statement in the hearing record. We appreciate the opportunity to make this presentation and would be delighted to respond to questions. We really appreciate the leadership that you have provided over the years.

[The conclusion of Dr. Ozbun's prepared statement follows:]

Mr. Chairman and members of the committee, the unique Federal/State agricultural science and education system is not part of the problem—it is part of the ultimate solution. Failure to support the system at any time is not advisable: however, the current proposed cuts could not have worse timing. Our national needs in agriculture and natural resources are overwhelming. Further, the capacity of our States and local communities to pick up the Federal share is at a low ebb. The demise of markets for agriculture, forestry, mining, and petroleum are decimating the majority of our States and pushing many local communities to the brink of economic disaster. Our recommendations to you are not with disregard for national fiscal problems, but rather with full cognizance of the longer term needs of our Nation.

### SUPPORT FOR RURAL AMERICA

Senator COCHRAN. Thank you, Dr. Ozbun. I know the administration has not requested as much funding as many of us would like in some of the areas of activity which are important, and I agree that we are going to have to take a careful look before we approve any of these changes.

This subcommittee has proven, I think, over the period I have been associated with it, to be very sensitive and understanding of the needs of rural America, as well as the role that our land-grant colleges and universities and teaching centers around the country play in the continued development of rural America, and bringing to the people who live in rural America an opportunity for genuine economic progress, higher standards of living, health care—comforts that one feels now are part of the American system.

Even though we have constraints under the budget act and constraints imposed on us by the Gramm-Rudman-Hollings law, we are going to continue to try to help meet those responsibilities, but we are probably not going to have as much money to pass around as we have had before, and that is just a fact. It is not just that the administration has dreamed that up, but the Congress, through the passage of Gramm-Rudman-Hollings and through the imposition of strict ceilings on the Appropriation Committee, have just made that a part of life for us in this budget environment, in this deficit environment.

Nobody likes to talk about the budget deficit, just like nobody likes to talk about nuclear accidents. There are a lot of unpleasant things that we have to confront and deal with from time to time, but the deficit is a real problem, and we have to do our part, I think, as a part of the effort to keep our country healthy economically. I think we can do that and at the same time meet some of these important needs that you identify. We are probably not going to be able to see them funded at levels that we would like, but I think we will find the right answers and keep ourselves going in the right direction and keep the country moving along.

You do a good job; a very fine job, and we appreciate your being here today and helping us to identify some of these problems that we still have to solve, and it takes money to solve them; we understand that.

Thank you for being here.

Mr. OZBUN. Thank you; we appreciate it. Do not forget that this is the centennial for the Hatch Act.

Senator COCHRAN. Congratulations on that.

[The statements of various representatives of the National Association of State Universities and Land-Grant Colleges follow:]

## STATEMENT OF DR. KAREN CRAIG, VICE PRESIDENT, AND DR. JOAN R. MCFADDEN, EXECUTIVE DIRECTOR, AMERICAN HOME ECONOMICS ASSOCIATION

From its beginning, Home Economics programs have been an integral component of the Cooperative Extension Service. The goal of the Home Economics component is to improve the quality of life for individuals and families through the enhancement of their economic and social well-being.

Families have a major impact on agriculture through their consumption and non-market production practices, their provision of human capital, and their linkage to the community and its environment. The centrality of the family to the productive capacity of the agricultural enterprise warrants the Extension Home Economics educational programs in order to ensure family well-being. The purchasing power, income stability, and resource management skills of families are important not only to their economic well-being but also to that of communities, especially those dependent on the food and agricultural economy. The physical well-being of families depends on meeting basic needs, including access to adequate housing, food and clothing, and on the continued availability and access to community resources.

The well-being of American families is essential to national strength since the values that underlie national stability are forged by families. Pressures brought to bear on families as a result of social and economic change have made them an object of much concern. Home Economics Cooperative Extension works to strengthen families by providing them research-based knowledge that can be applied to such areas as provision for food, clothing, shelter, and emotional support.

All of life's education does not occur in the classroom. Over 80 million families and youth are learning how to cope with and prevent some of life's problems through their involvement with the Extension system. The educational efforts of Home Economics Extension professionals currently are multiplied by the work of more than 600,000 volunteers in both rural and urban areas throughout the country. In addition to volunteers, a cadre of paraprofessionals works with Home Economics professionals in the Expanded Food and Nutrition Education Program (EFNEP), which seeks to better the nutrition of families with limited resources. The content of Home Economics programs makes them relevant to both rural and urban families, and the programs are thus offered accordingly. Home Economics educational programs are educational, developmental, and/or preventative.

### Family Stress/Family Well-Being

The pressures impinging on the family and its individual members are increasing and are manifest in such factors as bankruptcies, divorce, alcholism, suicide, and stress-related health conditions, some of which will not be apparent for some time.

The agricultural sector influences family and community well-being as evidenced by the recent farm crises in sections of the country. Families are faced with increasingly complex decisions involving demands on their resources while responding to forces of inflation, high unemployment, and changes in technology. Unemployment, coupled with inflation, make basic survival needs, such as housing, clothing, and in some cases even food, out of the reach of many. Problems of the elderly and other vulnerable groups are aggravated by the present inflationary trends.

Demands for programs to address the needs of distressed families is increasing. Home Economics Extension needs to continue the programs providing stress management assistance, counseling, and financial alternatives.

### Nutrition

Home Economics Extension programs provide a vehicle for dissemination of information on food and nutrition to the general public. This is critical because of the complex nature of the diet-health relationship, and the proliferation of conflicting advice. The increased concern for personal health and health costs in our society have accelerated the need for reliable, objective, research-based nutrition information. This Home Economics Extension program maximizes the efforts to improve the nutrition and health status of the population through increased knowledge and understanding of the interrelationship of food and nutrition to health. The goal is to improve consumer food choices leading to better general health for all, including those at greatest risk, e.g., the elderly, adolescents, pregnant and lactating women. Therefore, it is important that enhanced nutrition education continue.

Production practices influence the nutritional content of a given food stuff, and the processes by which food is converted into an acceptable consumer product may further affect the nutritional content and/or its safety. Families need adequate and wholesome food. Education through Extension also addresses factors such as income, attitude, and lifestyle which play key roles in food selection and meal planning decisions of individuals and families.

## Expanded Food and Nutrition Education Program (EFNEP)

Malnutrition is more prevalent among the poor than any other group in the United States. A recent research study of Oklahoma EFNEP families revealed that the program does make a significant different and is a cost effective preventative program. As a result of completing the EFNEP program, many families have left welfare, entered the labor market, increased self-confidence, and improved time and money management skills. The direct teaching and encouragement from the paraprofessionals help to motivate and direct the behavior of families.

The Expanded Food and Nutrition Education Program provides information to low-income homemakers, one-on-one or in small groups, on how to use available food resources to improve their families' diets. Since 1969, over two million homemakers have been enrolled in the program. More than 55,000 volunteers, including many who have completed the program, work with staff to extend this teaching to homemakers and youth. Better health, lower health costs, and increased family stability are among the direct results of this scientifically-based education program that helps low-income families ensure good nutrition within their financial limitations. This client group includes a high proportion of pregnant women and young children for whom adequate nutrition is a critical national concern.

## Volunteers

About 900,000 Extension trained volunteers, including 600,000 volunteer Extension homemakers who are members of the National Extension Homemakers Council (NEHC), make up the volunteer Extension team. NEHC has been closely associated with Extension since 1936. The volunteers extend Extension education to millions of people who would not otherwise be reached; for example, some 57,000 EFNEP volunteers help teach nutrition to low-income adults and young people, and at least 150,000 volunteers trained by Extension home economists teach 4-H youth.

## Home Economics Extension Program Priorities for the '80's

The Extension Service Home Economics programs have established the following as the major priorities for the 1980's:

Food, nutrition, and health. Helping people identify relationships between diet and health; teaching people how to select, prepare, preserve, and store food; informing people about the principles of food safety; determining attitudes and behavior that affect dietary patterns; and promoting fitness and health.

Family economic stability and security. Lifelong financial management, managing resources, increasing consumer competence in the marketplace, and understanding the economy.

Family strengths and social environment. Helping build strong, supportive family systems and encouraging family and community leaders to work together to create an environment that supports the needs of all families.

Energy and environment. Limiting energy use, helping families achieve the best possible home environment through good housing decisions, and educating people about ways to control and conserve the quality of the soil, water, and air that make up their general environment.

Volunteer/leadership development. Helping people develop community leadership skills; encouraging group involvement and participation in decision-making.

The President's proposed budget for FY '87 would reduce Federal funding for Extension Services, USDA, by 59% and direct the remaining funds to "enhance farm profitability and for the conservation of soil and water." By such a budget proposal, the Administration has failed to recognize that farm profitability depends on the well-being of the family, including their economic and social well-being. Home Economics Extension programs are directed to improve family well-being and, therefore, are an investment to build and maintain healthy bodies, healthy minds, healthy families, healthy communities, enriched family living, and are essential if farm families are to achieve "farm profitability."

On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of the Home Economics Extension Service programs and the importance of the Federal support in this partnership with states and local communities. We appreciate your support in the past and urge you to support the NASULGC budget for Extension Service, USDA, for FY '87 at five percent over the FY '86 level plus the new and/or expanded special programs including $5,000,000 for Enhanced Nutrition Education in order to assure quality Extension programs, including the Home Economics Extension programs.

## STATEMENT OF DR. LAWRENCE CARTER, 1890 REPRESENTATIVE

Mr. Chairman and members of the Subcommittee, on behalf of 1890 Cooperative Extension Programs, I appreciate this opportunity to appear before this elite committee to formally represent the 1890 Land-Grant Institutions and Universities.

Since their actualization in 1972, Cooperative Extension Programs at 1890 institutions have played a significant role in providing educational information and direct technical assistance to thousands of small farmers, farm families, 4-H youth and community residents who have not benefited from traditional Cooperative Extension Programs.

The one-on-one delivery concept has allowed 1890 Cooperative Extension Programs at these institutions to reach limited resource consumers across the Southern Region with educational programs in nutrition and health, production agriculture, family resource management and community resource development.

These institutions have provided educational assistance to both limited resource families and individuals through the work of extension professionals and paraprofessionals. Small farmers in states where these programs are conducted, have witnessed the demise of a traditional agriculture which provided a place for them to participate and generate economic support for themselves and for their families. Production, management and marketing problems are some of the major contributing factors to the economic stress faced by many farm families.

The proposed FY '87 budget reduction of 59% would have a detrimental impact on the capability of 1890 institutions to continue their Extension Programs, since these institutions depend solely on federal support. To this end, we support the National Association of State Universities and Land-Grant Colleges recommendation for Smith-Lever and 1890 Extension base programs be restored at five percent above the FY '85 level. This does not represent a substantial increase but a minimum to maintain programs at their current levels.

I thank you again for this opportunity to express our concerns with the proposed Executive Budget for Cooperative Extension Programs at all Land-Grant Institutions across the country.

## COUNCIL FOR AGRICULTURAL RESEARCH, EXTENSION AND TEACHING

### STATEMENT OF ROY MEEK, CHAIRMAN

**ACCOMPANIED BY:**

**BONNIE HAMMERSTEDT, 1988 CHAIRMAN, BUDGET COMMITTEE**
**DICK JOYCE, 1987 CHAIRMAN, BUDGET COMMITTEE**

Senator COCHRAN. Our next witness is Mr. Roy Meek, who is with the Council for Agricultural Research, Extension and Teaching. He is a farmer from here in Virginia.

Welcome, Mr. Meek. Please introduce those who are with you.

Mr. MEEK. Thank you, Mr. Chairman.

I have with me today Mrs. Bonnie Hammerstedt of New Jersey, along with Mr. Dick Joyce. Mr. Joyce is the current chairman of our budget committee, and Mrs. Hemmerstedt is the one who will succeed him.

We are most grateful to you for providing us the opportunity to appear before the subcommittee to present our views concerning the administration's 1987 budget recommendations for our land-grant college programs in agricultural research, extension, and teaching.

As voluntary lay leaders, we have been actively engaged as advisers and planners in implementations of these programs. We have been its critics and enthusiastic supporters, and truly feel delight in that we have been thoroughly engaged in a democratic process in these programs of partnership from all levels of the Government.

I am sure I need not go into detail about the condition of the agricultural economy, the stress on the farm family and those in rural America who depend on a healthy farm economy as they attempt to support the various aspects of agribusiness. There is a song from earlier years which is entitled, "Is Anybody There? Does Anybody Care?" This, I think, depicts the feeling of those in rural America who are associated with the many aspects of the entire field that we refer to as agribusiness.

When the administration presented its 1987 budget recommendations to Congress, we were stunned by the disproportionate cuts of 59 percent for extension programs. We realized then that there was somebody there, but we wondered if they really did care.

As chairman of the CARET organization, I have been literally covered with correspondence from all over the United States, as I am sure you have, from people who were upset and wanted immediately to march on Washington. I am convinced that this is not the direction to take, for I have confidence in the system that 123 years ago established the land-grant colleges, whose primary function was to meet the educational needs of its people in agriculture, and who in 25 years realized that the available technical knowledge being taught was limited because of a lack of a system to develop new technology.

Thus, just nearly 100 years ago, we saw the establishment of the agricultural experiment stations throughout this great Nation, and 17 years later, in order that these newly developed technologies could be shared and used, the cooperative Extension Service came into being.

### COOPERATION OF GOVERNMENTS AND INDIVIDUALS

Through the cooperation of the Federal, State, and local governing bodies over the past eight decades, citizens, most of them volunteers, have written the greatest success story ever told. Just over 2 million farmers and ranchers supply the food and fiber for 230 million Americans and produce approximately $50 billion in agriculture products for export.

In agriculture, our past is a story of success, but our future is clouded. It appears that we are being punished because of our production efficiency. Our economy suffers because of many factors not of our own making. People involved in agriculture have been brought to their knees, and never in the history of this country has the need been greater for knowledge furnished through this land-grant college system.

Agriculture will survive. I am convinced of that. But it must be guided by knowledge—that knowledge which begins with young members in the 4-H Club and continues to be developed in the various land-grant colleges. Rural America must continue to be supported through these very stressful times. Communities must be held together until agriculture finds its new direction.

Teaching and development of new minds is no less important today than it was 123 years ago. Research is equally important, as we attempt a redirection from maximum production to maximum profitability, and to continue the ability for maximum production for this Nation's security.

Cooperative Extension's ability to activate thousands upon thousands of volunteers in its educational efforts continues to be an investment rather than a cost to this Government.

I guess, Mr. Chairman, that what I would like to stress here today is that I realize agriculture and rural America can bring about these changes. We just ask that we be furnished knowledge in order that we do that through the system that has already been established and through that knowledge that we be allowed to continue to feed this great Nation at a bargain not enjoyed by other countries of this world.

Thank you.

Senator COCHRAN. Thank you, Mr. Meek. I appreciate your taking time to develop such a comprehensive statement and presentation to the committee today. I have reviewed in a cursory way all of the documents that you filed with the committee, and a lot of work has gone into this, and I think we will benefit from it.

I notice here you trace the history of a lot of our Extension projects, projects that have been carried out through the Extension Service, and these are people who work very close to the local communities. They are part of the local communities, and through the volunteer network and the unusual relationship that these people have in the communities, I think it has been an important part of the success we have had as a nation. It certainly has given us an added dimension of strength and cohesiveness.

I don't know what the total appropriation is going to be after we complete our hearings and work as a committee to look at the options that we have, but I do know that we are going to try to improve upon the budget that was submitted by the administration to the Congress in these areas.

I don't have any doubt that we are going to find that the committee is going to be interested in increasing some of these numbers. We want to do our part to help reduce the deficit, and we understand the importance of that, but we also understand the value of a lot of these programs, too.

So I think we are going to see a genuine effort made to move in the direction you would prefer to see us move, and your being here and helping us provide this information for the record will be a big help.

Mr. MEEK. Thank you.

Senator COCHRAN. Thank you very much for being here.

[The statements of Mr. Meek and others follow:]

## STATEMENT OF ROY A. MEEK

Mr. Chairman, and members of the Committee. My name is Roy Meek, Chairman of the Council for Agricultural Research, Extension and Teaching more commonly known by the acronym "CARET". CARET is associated with the National Association of State Universities and Land Grant Colleges and is a national organization of volunteer leaders representing farm operators, agribusiness, homemakers, youth, banking and other allied interests concerned with agricultural science and education. Other CARET delegates with me today are Dick Joyce of Oregon who has been our liaison with the budget committee representing the Division of Food and Agriculture of the National Association. Mrs. Bonnie Hammerstedt of New Jersey will succeed Mr. Joyce in that position in 1988. Mr. Chip Morgan from Mississippi is our current secretary of CARET.

We are most grateful to you, Mr. Chairman for providing us the opportunity to appear before the subcommittee to present our views concerning the Administrations 1987 budget recommendations for our land grant college programs in agricultural research, extension and teaching.

As volunteer lay leaders, we have been actively engaged as advisors, planners, and implementations of these programs. We have been its critics, enthusiastic supporters and truly feel delight in that we have been thoroughly engaged in a democratic process in these programs of partnership from all levels of government.

When the administration presented its 1987 budget recommendations to Congress we were stunned by the unbelievable and disproportionate cuts of 59% for Extension programs. This "burn-my-house-down spirit" reverberated throughout the nation. As this news spread, thousands upon thousands of farmers, and citizens throughout the country began to register their devastated feelings to their Congressional representatives, the White House, OMB and USDA officials. They just could not believe that the Federal Partner could be so insensitive to the plight of American agriculture suffering its greatest financial stress since the great depression. The nation's media provided further effective blasts in support of research and extension.

National farm organizations, commodity groups and other allied groups supporting agriculture also expressed their disapproval of proposed budget cuts.

The budget proposal of the administration further recommend that Extension limit their services to farm operators until their needs have been fully met. This we believe to be ill conceived and to narrow a definition for extension to fulfill its obligations. Agriculture not only involves farmers but agribusiness, lenders, lawyers, families and the entire scope of community relationships.

Just think of what it would mean for our communities not to have program opportunities for rural and urban youth in 4H clubs. These are often the only opportunities for youth to enrich their lives. It would be a tragedy to discontinue such programs for our American youth.

Extension is actively engaged in programs designed to help farmers and families in financial stress. Recommended reductions would curtail this efort when they are needed most. Rural communities desperately trying to survive would be left with very little or no Extension assistance.

How do we put a dollar value on Extension consumer programs that help consumers plan family budgets or teach proper nutrition and health to enable happier more healthful lives? How can we help convince families, who need our programs the most, learn to get more from their resources to enhance their well being. How can we continue to undergird 2.9 million volunteer leaders who multilpy Extension programs to reach more of our nations families? They are one of our coutries most valuable resources, who freely give of their energies to help people help themselves. How can we help families prevent personal tragedies? These are far from frivolous expenditures of public monies.

Today, our groundwater resources are being adversely affected by man's activities which are causing increased public concern with contamination. In the interest of correcting what will be far more serious in the near future, we strongly recommend the research and extension proposals to develop and implement coordinated interdisciplinary programs for agricultural producers, local governments, and the public. We also ask that you continue a small investment in the Renewable Resource Extension program which has increased economic potential for returns to privately owned forests and rangeland. The Integrated Pest Management programs are increasingly cost effective to farmers and the agribusiness industry. The continuation of this program is targeted to special agricultural needs which offset further environmental impacts, improvements to water quality and greatly reduced costs to farm producers. Mr. Joyce sitting nearby said he saved $2,500 on spray costs on 20 acres of cherries last year, as a participant in IPM program.

The shortages of highly trained scientists continue to threaten our technology related to food and fiber. We encourage your continued support for graduate fellowship programs if we are to avoid serious shortages in replacement needs of personnel in the near future. It is difficult for us to realize that today's freshman in college will be our scientists at the turn of the century.

Frankly, we do not know of another government sponsored research and education program that continuously returns 30-50 percent annually on its investment. It is a sound investment of public monies and has and will continue to benefit this nation and its people.

After many sessions with our state and regional groups of volunteer leaders and supporting groups, we conclude that our land grant colleges will not be able to respond to society's expectations or discharge national responsibilities without substantially increased support over what has been proposed by the administration. Nothing could be more devastating than to deny our farmers the very best technology available.

We are grateful for the economic and social improvements to farm families, rural communities and the nation's welfare. A recent Washington Post article dubbed Extension efforts as — "an example of government at its best, government that works". These programs have been and continue to be remarkable and responsive programs that have no bureaucratic hangups, no scandals, no history of misuse of government funds.

As users of these programs we join our land grant college administrators in their deep concern with the unprecedented economic and social traumas of this decade affecting agriculture. If American agriculture is to return its pre-eminence in the world, and be competitive then it is imperative that scientific research and technology development be enhanced.

Many of the future gains for agriculture will not come from traditional sources of technology but from promising investigations underway in biotechnology which demonstrate great promise in reducing production costs.

Farm operators will need to learn how to make technical adjustments now and continue to make adjustments with the help of our Extension Services. Economic adjustment is a continuous process for our agricultural sector that is always downsizing itself as capital substitutes for labor and as labor and other inputs are made increasingly productive.

Currently, in this time of instability the increased demands on research and extension have been magnified. These forces of instability have been felt by lenders, suppliers, rural governments, schools and entire communities and to a degree our entire economy. In many areas of our country the farm financial crisis has resulted in reduced economic vitality necessitating reductions in state and county budgets.

One of the bitter ironies of this economic trauma being visited on agriculture is that the increased need of research and education from our land grant colleges is occurring at a time when their capacity to respond is seriously limited because of restraints on federal and state funding.

If the federal budget for the Cooperative Extenion Service is reflecting a plan to force a transfer of support to State and local governments, there will be serious erosion to our domestic farm policy and our ability to remain globally competitive. This will cause long range adverse effects and will multiply public costs in the future for both consumers and producers. National leadership for priority educational programs, cooperative work related to a host of other federal agencies and the revival of our farm economy, will suffer greatly. States will tend to go their own way and rural America will be sacrificed and distressed to a greater degree.

The problems of agriculture are far from resolved and adjustments have only begun to occur. Agriculture will be undergoing adjustments for several years to come.

Farm-food-fiber in this country accounts for 20 percent of our gross national product and 18 percent of our exports. Agribusiness is the single largest economic segment of our economy. While 3 million are employed in farming 22 million additional people are employed in associated jobs. Together it is a gigantic engine driving employment, foreign trade and production. As a nation we can ill afford to have agriculture lose its place as a dynamic economic force.

CARET has been actively engaged in the budget planning process and unanimously supports the 1987 budget recommendations submitted by the Division of Agriculture of the National Association of State Universities and Land Grant Colleges. Our land grant colleges respond to the challenges inherent in the many dimensions of the crisis and act in the best tradition of service to people. We sincerely hope you agree.

Therefore, Mr. Chairman, and Members of the Committee, we ask that you carefully review these requests as important efforts to help answer the serious plight of American agriculture. We thank you for this opportunity. We would be happy to answer any questions.

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## STATEMENT OF ROBERT L. CROM, DIRECTOR, COOPERATIVE EXTENSION SERVICE, AND DEAN, UNIVERSITY EXTENSION, IOWA STATE UNIVERSITY

For seventy-two years the Cooperative Extension Service has been an effective federal, state, and county partnership. Its basic objective has been to improve U.S. agriculture, to develop youth, and to strengthen families and rural communities through the dissemination and application of research-based knowledge. That partnership is being placed in serious jeopardy by President Reagan's proposed 59 percent reduction in federal appropriations for the Cooperative Extension Service in fiscal year '87. The fact that this reduction comes in the midst of a major financial crisis throughout American agriculture and rural America is both surprising and extremely difficult to understand.

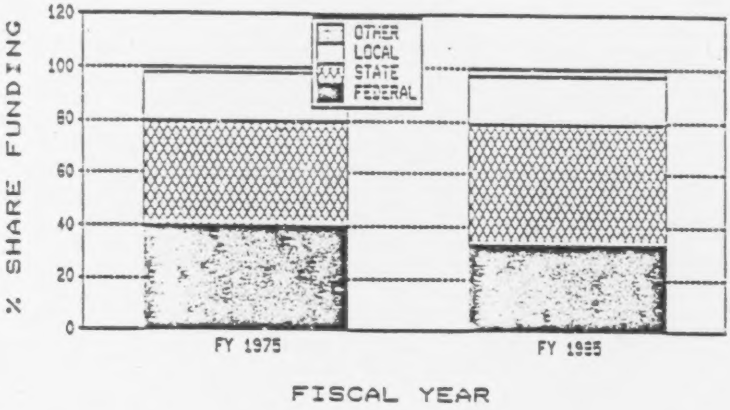
Personal stress and family tragedies have accompanied these economic troubles. Increasing suicides, murders, and family break-ups in rural America — a segment of society with a long tradition of stability — are cause for substantial concerns in and about our nation's rural communities. The Cooperative Extension Services are working diligently and effectively to help farm families and others affected within those rural communities. They are helping them to look at their problems realistically, to identify viable options for the future, and to manage the stress within their families and institutions. As far as finances are concerned, current resources allow Extension to serve only about one-fourth of the farm families in need of intensive financial counseling. The proposed 59 percent cut in funding would further reduce the capacity of Extension to address these needs.

Consumers in both rural and metropolitan areas are other beneficiaries of the Cooperative Extension investment. Lower cost and better quality food is one result. In addition, consumers across the United States also benefit and learn from Extension efforts which improve their diet and health, reduce their medical costs, improve their abilities to manage household finances, help them be better parents, and increase the stability of the family unit, to name only a few.

A major portion of Extension's 4-H and home economics programs always have been carried out by volunteers. Extension trains the leaders and provides the knowledge base, while nearly three million active volunteers give their time, gain and improve leadership skills, and make it possible to reach millions more adults and youth. 4-H provides the only organized youth program available in many rural areas.

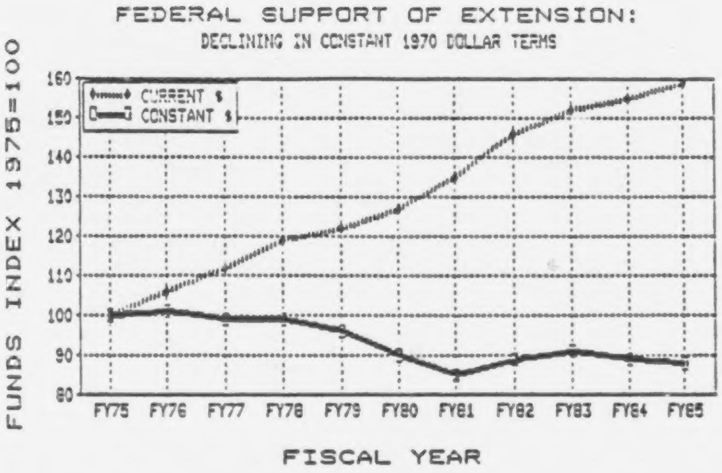
The federal-state Cooperative Extension system is active in 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, Micronesia, and the Northern Marianas. Since the passage of the Smith-Lever Act of 1914 the system has succeeded as a federal-state-county partnership in both program decisions and funding commitments. In 1985, the federal government funded 33 percent of Extension efforts; states supported 46 percent; and local governments provided 21 percent.

SOURCES OF EXTENSION FUNDING:
FEDERAL SHARE DECLINING



The Cooperative Extension Service is also an integral part of land-grant universities in the states, including the historically black land-grant institutions, and Tuskegee University. It links the researchers in the Experiment Stations to those who need and use the research. By keeping abreast of the results of the research efforts of USDA and land-grant universities, Extension staff speed the application of scientific discoveries; i.e., facilitating technology transfer.

Cooperative Extension is a highly adaptable institution that modifies its outreach programs to accommodate the changing needs of its clientele. However, the capacity of Extension to respond to the array of local, state and national needs is a function of the resources available. In this regard, states have been forced to assume an increasingly larger role as federal support in real terms has declined. However, it is quite clear most states and counties which already bear the largest share of the burden are in no position to assume an even larger share.



The national interest is served, and federal investment required, as the Cooperative Extension system continues to:

Lead and teach nationwide in adapting and transferring the science and technology which contributes to productivity, economic growth, and the viability of agricultural producers, businesses, families, and communities.

Identify and respond educationally to critical national issues affecting the food and agricultural system, such as improving human nutrition and health, managing soil, water and other natural resources, and restoring U.S. agriculture competitiveness in the world market.

Equip federal, state and local governments, organizations, and individuals to respond to natural disasters and catastrophes including outbreaks of animal and plant diseases, insect infestations, drought, floods, hurricanes, and tornadoes.

Conduct nationwide, or targeted, educational programs necessary for effective and timely implementation of federal regulations and policies; recent examples include the Conservation Reserve program and the dairy herd buy-out.

RECOMMENDED MODIFICATIONS TO FY '87 BUDGET

To maintain current services of the system the Division of Agriculture of the National Association of State Universities and Land-Grant Colleges (NASULGC) is recommending the following modifications in the President's recommended budget for FY '87:

A. SMITH-LEVER 3b AND 3c FUNDS (+$126,011,000): Restoration and five percent increase over FY '85 funding. At a time when rural America is facing financial stress and economic uncertainty, the Cooperative Extension system provides needed assistance and education in four basic areas: agriculture and natural resources, home and family living, 4-H and youth development, and community resource development. The dollars invested in this unique federal, state and county partnership are returned many times over in terms of improved economic performance, improved quality of life for both clients and consumers as a whole, and reduction in environmental degradation.

B. 1890 EXTENSION PROGRAMS (+$11,424,000): Restoration and five percent increase over FY '85 in 1890 and Tuskegee extension programs for maintenance of their important agricultural programs for limited-resource clientele and, particularly, small and part-time farmers. Approximately one-half of funds allocated to these institutions will be used to enhance financial management programs to restore farm profitability and agricultural competitiveness.

The operation and maintenance of the Cooperative Extension Program at 1890 institutions depend almost entirely on federal funds. Thus the proposed federal reductions are even more serious for these institutions.

The 1985 Farm Bill provided authority for an 1890 Extension facilities program. While that program is critically needed, the request for funding is being deferred until the FY '88 budget, in recognition of the severity of current fiscal constraints.

C. D.C. EXTENSION (+$633,000): This represents a restoration of the D.C. Extension program with a 5 percent increase over FY '85.

D. RESTORATION OF CRITICAL SPECIAL PROGRAMS: The Smith-Lever 3d funds are distributed to states to address specific problems, with funding formulas based upon the extent of the problems in each state. The needs are well identified and the effectiveness of these programs is well documented. Continuation is essential if Extension is to respond to these needs. The specific programs are:

- Expanded Food and Nutrition Education Program (+$60,354,000): Better health, lower health costs, and increased family stability are among the direct results of this scientifically-based education program that helps low-income families ensure good nutrition within their financial limitations. This client group includes a high proportion of pregnant women and young children for whom adequate nutrition is a critical national concern.

- Integrated Pest Management (+$7,531,000): Continuing concerns about water quality, environmental impact, and farm production costs have created a need for an integrated systems approach to synthesize research in pest management technology and deliver it to farmers and the agribusiness industry. Projects are targeted to each state's agricultural need. The elimination of these programs would seriously impair the ability to attack mounting problems related to pest management.

- Farm Safety (+$1,020,000): Farming and ranching are among the most dangerous of all occupations. Education and training programs with farm operators, 4-H youth and others have increased their awareness and skills, thus preventing many farm-related accidents. Continuation of this program can save both lives and unnecessary medical costs, and reduce accidental disabilities.

- Pesticide Impact Assessment (+$1,716,000): The continued evaluation of agricultural chemical materials is essential to the nation's supply of food and fiber to a productive and profitable agricultural economy, to farm safety, and to the environment as a whole.

- Urban Gardening (+$3,500,000): Through this program, urban youth and adults have grown products with an annual market value of over $20 million. The application of the agricultural sciences to garden food production has contributed to general improvement in the diets of the gardeners, enhanced community cooperation, and led to personal satisfaction among thousands of participants.

- Rural Development Centers (+$720,000): Four rural development centers serving all states provide a focus for technology transfer and citizen awareness. Through integrated efforts and cooperation between research and extension faculty, the Centers encourage economic development and diversification, efficient community services, and contribute to a knowledgeable local leadership base.

- Renewable Resources Extension (+$2,625,000): A relatively small investment will provide a program of technology education that will increase the profitability of privately owned natural resources and better meet the growing demands on renewable resources.

E. NEW AND/OR EXPANDED SPECIAL PROGRAMS: With very limited resources, the Cooperative Extension system is addressing three of the major national issues facing America. Additional federal resources would be a timely and prudent investment.

1. FARM FINANCIAL MANAGEMENT/AGRICULTURAL COMPETITIVENESS (+$10,000,000): Expanded efforts are needed to address both the short-term and long-term needs of farm operators. In the short-term, distressed farm families need continuation and expansion of financial management and stress management assistance, hotline services, counseling relative to farm and family alternatives and continued cooperative support efforts among public agencies and lenders. In the longer term, a "systems approach" must be developed to reduce costs of production, increase marketing effectiveness, and thus improve the profitability of farming and increase U.S. agriculture's competitiveness in the market place.

   As we move into the third year of farm financial problems, serious stress is beginning to appear in rural communities as agribusiness and small business establishments go into bankruptcy or close. The need for rural revitalization is rapidly becoming a critical issue.

2. WATER QUALITY AND MANAGEMENT (+$5,000,000): Water is essential to human health as well as production of food, fiber, and forest products. Thirty-four states have identified problems of agricultural non-point sources of groundwater pollution. Economically sound systems must be developed, accepted, and adopted to ensure proper management and conservation of our water supply. The extension and research system must find increased resources to address these problems.

3. ENHANCED NUTRITION EDUCATION (+$5,000,000): Diet is known to be a factor in the prevention and treatment of heart disease, cancer and stroke, the leading causes of death in the United States. The complex nature of the diet-health relationship, concurrent with the proliferation of conflicting advice and increased concern for personal health and health costs in our society, have accelerated the need for reliable, objective, research-based nutrition information. Extension can provide centers of excellence to maximize education in food and nutrition, with the goal of improving consumer food choices leading to improvement in general health for all, including those at greatest risk, e.g., the elderly, adolescents, pregnant and lactating women.

## FISCAL YEAR 1987 APPROPRIATIONS RECOMMENDATIONS

(In Thousands of Dollars)

| Extension | FY 1986*** | FY 1987 President's Proposal | FY 1987 NASULGC Recommendations |
|---|---|---|---|
| Smith-Lever: | | | |
| Sections 3b & 3c | $240,035 | $127,547 | $253,558 |
| Section 3d: | | | |
| EFNEP | 60,224** | -0- | 60,354 |
| Pest Management | 7,486 | -0- | 7,531 |
| Farm Safety | 1,014 | -0- | 1,020 |
| Pesticide Impact Assessment | 1,706 | -0- | 1,716 |
| Urban Gardening | 3,479 | -0- | 3,500 |
| Rural Devel. Center | 720 | -0- | 720 |
| IRM (Nebraska) | 49 | -0- | -0- |
| Farm Financial Management/Ag Competitiveness | 1,491 | -0- | 10,000 |
| Water Quality and Management | -0- | -0- | 5,000 |
| Enhanced Nutrition Education | -0- | -0- | 5,000 |
| D.C. Extension | 977 | 399 | 1,032 |
| 1890 College & Tuskegee | 17,635 | 7,204 | 18,628 |
| Renewable Resources Extension | 2,485 | -0- | 2,625 |
| Federal Administration | 5,446 | 4,850 | 4,850 |
| Total | $342,747 | $140,000 | $375,534 |

** Includes $38,627,000 transfer from Food Stamp Program.

*** Subject to a 4.3% reduction (Gramm-Rudman-Hollings) effective March 1, 1986.

SUMMARY

The Cooperative Extension system is the connective tissue between the investment in research and its translation into economic and social results. Extension spreads knowledge beyond universities and laboratories. It is a two-way communications system extending knowledge to the points of application and alerting researchers to new problems of farmers and other users. It is a highly effective and flexible problem-centered system.

Today, change is affecting the United States at a record-breaking pace. The need for a dynamic, healthy agricultural science and education system has never been greater. That system and the partnership which I have described would be put in serious jeopardy if the 59 percent federal reduction recommended in the Executive Budget is accepted by Congress. Significant effects will immediately be felt:

- The typical state Cooperative Extension Service will lose 20 percent of its total operating budget. 1890's Tuskegee University and ES-USDA will lose 60 percent of their operating budgets.

- Conservative figures indicate forced staff reductions of more than 8,500 full-time staff equivalents — more than 3,000 professionals and 5,500 paraprofessionals.

- Major Extension programs would be totally eliminated state-by-state as each assesses its priority needs. In special danger are the Expanded Food and Nutrition Education Program (EFNEP), Integrated Pest Management (IPM), urban gardening in the largest city in 21 states, Renewable Resources Extension (RREA) and, in all likelihood, the regional rural development centers.

- Special consideration would be required from Civil Service for early retirement provisions as well as continuing employee fringe benefit liability.
- University tenure and/or union regulations would infringe on program disengagement opportunities.
- Extension would lose much of its current capacity to address the urgent financial stress problems of farmers, farm families and rural communities.
- Extension would be further reduced in its ability to respond to high national priorities in 1986-87: restoring agricultural profitability; water quality and management; and diet and health concerns.
- Capability of ES-USDA to coordinate programs with other federal agencies would be greatly reduced or eliminated.

In behalf of the Extension Committee on Organization and Policy (ECOP), I want to express gratitude for the continued and substantial investment Congress has sustained in the Cooperative Extension Service and land-grant system. Be assured, both remain true to their heritage — service to people and to the nation.

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## STATEMENT OF DR. L.W. DEWHIRST, DIRECTOR, ARIZONA AGRICULTURAL EXPERIMENT STATION, AND CHAIRMAN, EXPERIMENT STATION COMMITTEE ON ORGANIZATION AND POLICY [ESCOP] BUDGET COMMITTEE

The Budget Subcommittee of the Experiment Station Committee on Organization and Policy (ESCOP) has been actively and continuously involved in providing input to the budget development process for the Cooperative State Research Service (CSRS) of Science and Education of the United States Department of Agriculture. It is in this capacity that the State Agricultural Experiment Stations (SAES) in each state and territory in the nation present this statement in response to the President's FY '87 budget recommendations.

Federal funds leverage $4 of state and local funds for every $1 of Federal funds provided through CSRS.

The SAES system conducts sixty (60) percent of the publicly funded agricultural research in the nation. Its 12,500 scientists address critical issues affecting agriculture in every region of the United States. The results of the Federal-State partnership established by the Hatch Act in 1887, one hundred years ago, have been the greatest success story in the human struggle to achieve adequate food and fiber. Agricultural production in the United States not only provides food to its citizens at the lowest relative cost in the world, it also accounts for major components of its exports.

The entire SAES system is acutely aware of the Congressional dilemma in responding to needs to develop reasonable and prudent budgets. These are paralleled by similar problems in almost every state. Certainly, we are supportive of those efforts at all levels. It is in the light of these realities that the SAES system has prepared this statement.

At the same time, we must look ahead and recognize that there are components that will help to solve problems as well as those which add to the dilemma. Agricultural research is a part of the solution and not a part of the problem. Research discoveries are essential to continued progress in a viable and competitive agricultural production system. The history of this country's entire development and premier position is testimony to that fact. Only through research will input costs decrease, quality be maintained, acceptable levels of environmental pollution be reached and maximum economic benefit occur through successful competition in the global marketplace.

The ESCOP Budget Subcommittee originally developed a budget which included five (5) new or expanded initiatives. These included proposed increases in Formula Funds, Special Grants (89-106) and Competitive Grants (89-106). However, the realities of the current financial crisis and the dilemma that Congress faces has caused us to reevaluate our actions and to balance our concern for the financial state of the nation with the need to move ahead in research. The result is a proposal reaching you which proposes only very modest increases but does recommend reinstatement of the Special Grants (89-106) program and the inclusion of a New National Research Program on Water Quality and Management of $16,000,000.

Attached to this testimony is a copy of the Hatch Act Centennial Budget proposed by the ESCOP Budget Subcommittee and approved by ESCOP and the Division of Agriculture. The budget amounts included are identical with these included in the FY 1987 Budget Recommendation prepared and presented to you today by the Division of Agriculture. They have been separatec from that document only to better identify the proposed research budget.

The ESCOP Budget recommendations are backed up by an extensive effort by the SAES system to plan its future cooperatively. The results of those efforts are appended to this statement and are entitled "Research Initiatives: A Research Agenda for the State Agricultural Experiment Stations."

Finally, the entire SAES system expresses its appreciation for the opportunity to participate in a legislative process which allows for input from all levels of our society. We can each be concerned and each share in our country's problems and accomplishments. We are honored to be a part of that process.

## TUSKEGEE UNIVERSITY SCHOOL OF VETERINARY MEDICINE

### STATEMENT OF WALTER C. BOWIE, D.V.M., PH.D.

Senator COCHRAN. Our next witness on the agenda is Dr. Walter C. Bowie. He is dean of the school of veterinary medicine at Tuskegee Institute.

Dr. Bowie, welcome to the committee. We appreciate your being here.

Dr. BOWIE. Thank you very much, Mr. Chairman.

Mr. Chairman and members of the committee, I am Walter C. Bowie, Dean of the School of Veterinary Medicine at Tuskegee University, testifying on behalf of the school's request for $6 million for the proposed regional center for food animal production, research, and service.

You will recall, Mr. Chairman, that the school made a presentation on this subject before your committee 1 year ago. The committee expressed its support for the project and stated in its Report 99-137, on the Agricultural, Rural Development and Related Agencies, Appropriations Bill, 1986:

> The committee concurs with the House in providing $600,000 for planning a regional institute for food animal production, research, and service at the School of Veterinary Medicine at Tuskegee University. In fiscal year 1985, the committee requested that the Department and the Food and Drug Administration review the feasibility and necessity of the establishment of such a facility. This report has been received, and it supports the construction of this institute.

The House Appropriations Subcommittee had earlier agreed to devote $600,000 to planning and initial program staffing for the project, and the university is truly grateful. The planning process has begun, and this year the university is asking Congress to appropriate $5.4 million, the balance of the original request for the construction of this project.

I would like to take this opportunity to thank the chairman and the members of the committee for appropriating the planning funds. To date, the school has not received the funds from the Department of Agriculture, but the school's Veterinary Research Council is conducting the planning process informally.

There are two elements of the law which I would like to address today. They are the requirement that the school be regional in nature and the requirement that the school secure matching State funds. The Tuskegee University School of Veterinary Medicine has provided regional training in veterinary medicine since its inception. For that reason, ironically, it does not have access to State matching funds.

In 1948, the Tuskegee School of Veterinary Medicine began participating in the Southern Regional Education Board, with the responsibility to provide regional veterinary medical training of black students in the South. The school of veterinary medicine at Tuskegee has trained 570 students from 13 SREB States: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Many of these students were trained under the terms of the SREB contract. Currently, eight of those States and the State of New Jersey maintain contractual agreements with the school. These agreements are no longer limited to the training of black students, as they originally were.

As a result of its own affirmative action efforts, and due to the changing SREB arrangements, Tuskegee's student body has become the most diverse among all of the schools of veterinary medicine. In academic year 1985–86, Tuskegee enrolled 227 veterinary students from 29 States, the District of Columbia, the U.S. Virgin Islands, and the U.S. Commonwealth of Puerto Rico.

Included in these 29 States were all of the 12 States participating in the original SREB agreement, and the additional southern States of Arkansas, Delaware, Oklahoma, and Texas. Tuskegee University graduates are located in 43 States, the District of Columbia, the U.S. Virgin Islands, and the Commonwealth of Puerto Rico.

Clearly, Mr. Chairman, Tuskegee University School of Veterinary Medicine is a national resource.

The above information demonstrates that the school of veterinary medicine has served as a national, as well as a regional, training center. The major vehicle that has permitted students to attend Tuskegee, the SREB contract, is for training purposes only. It does not permit financial support of capital improvements.

### WAIVER OF MATCHING FUND REQUIREMENT

In truth, Tuskegee University is a privately controlled State-related institution. As such, the institution does not receive State support but rather State assistance.

Public Law 95–113 requires that universities which receive appropriations to establish or expand schools of veterinary medicine secure matching funds from the State government. In the testimony 1 year ago, the school of veterinary medicine requested a waiver of the matching requirement. The language in the reports from the House and Senate Appropriations Committee, however, did not refer to the waiver request.

There are two compelling reasons for waiving the matching requirement. First, there is no reasonable means available to obtain the matching funds. Because of its status as a State-assisted institution, it is unlikely that Tuskegee will receive the matching moneys from the State.

Second, the probable benefits of this program outweigh the public interest in securing the matching requirement. Through the proposed center, research will play a key role in assisting the small farmer. The proposed center must bridge the gap between the limited-resource farmer and the recent advances in biotechnology that hold great promise.

There are any number of reasons that I can further give you to support that need, but rather than go into that, I will request that the remainder of my statement be included in the record. Suffice it to say that I believe you will agree that Tuskegee and its school of veterinary medicine have, over the years, been very important institutions in terms of looking at the needs of the small or limited resource farmer.

We continue to do that, and we seek your assistance as we continue to plan for the years ahead.

Thank you very much, Mr. Chairman.

[The conclusion of Dr. Bowie's prepared statement follows:]

Diseases affecting minor species and other livestock throughout the South can cause major economic losses and reduce food production at a time when there is a great demand among the population for meat protein. It is reasonable to assume that recent advances in biotechnology can help to solve some of the current animal disease problems. These advances may enable the scientists to gain new knowledge of the immune system that will lead to the development of improved vaccines and prophylactic agents for the prevention and control of animal disease through recombinant DNA and development of monoclonal antibodies to diagnose infection and offer passive immunity. The creation of improved feed crops and additives to improve animal nutrition, the large scale production of growth hormones to speed animal maturation, improved embryo transfer techniques for superior breeding animals and the development of genetically disease resistant livestock through modern biotechnology will allow the American farmer to produce more food for more people and supply a better export market. Such advances in time will provide vital tools to the limited resource farmer so that he may be able to produce more food at less cost and thus improve the quality of rural life. Tuskegee University can play a vital part in this effort because of its extraordinary history of aiding the small farmer. Recent advances in biotechnology will support a continuum to this legacy.

Thank you, Mr. Chairman, for the opportunity to appear before you today.

## PLANNING FUNDS FORTHCOMING

Senator COCHRAN. Thank you, Dean Bowie. We appreciate having you before the committee again.

I do recall your presentation last year and the consideration the committee gave to the request for beginning this project there at Tuskegee. I am glad to be able to advise you that we took up this matter of the planning money with the Department of Agriculture. The $600,000 that was in the legislation last year provided for the planning for the regional institute for food animal production, research, and service has now been straightened out, I think.

They understand they do have the authority to transfer those funds, and we are advised that they should be received shortly. So if you don't get them within the next several weeks, please let me know.

Dr. BOWIE. Does that include the waiver for the matching requirement?

Senator COCHRAN. I am not able to advise on that, but I do know that the question of the authority to transfer the funds has now been cleared up, I am told. If there is difficulty with the matching requirement, we will have to take another look at that or work on that as a separate item. I am not aware that that is a problem. If it is, we will work on it with you.

Let me congratulate you on university status. I notice the letterhead on which your statement is prepared is Tuskegee Institute, and we had listed that as the official name of Tuskegee on our agenda, but then I notice that it is Tuskegee University now.

Dr. Bowie. That is correct.

Senator Cochran. Is that effective as of this year? When was that effective?

Dr. Bowie. As of this past June. The board of trustees approved the change as of this past June a year ago. I think it more adequately reflects the comprehensiveness of our programs at Tuskegee.

Senator Cochran. I congratulate you for that and for the continued fine work that is being done there. I think you are accurate in your description that it is not just a State institution of higher learning, but it is regional and even international in its impact and its service.

Dr. Bowie. That is correct.

Senator Cochran. Thank you very much, and we will try to help you on this.

Dr. Bowie. Thank you very much, Mr. Chairman.

## Clemson University

**STATEMENTS OF:**

**DR. O.J. DICKERSON, HEAD, PLANT PATHOLOGY AND PHYSIOLOGY, COLLEGE OF AGRICULTURAL SCIENCES**

**DR. B.H. ROBINSON, HEAD, DEPARTMENT OF AGRICULTURAL ECONOMICS AND SOCIOLOGY, COLLEGE OF AGRICULTURAL SCIENCES**

Senator Cochran. Our next witness is Dr. O.J. Dickerson and Dr. B.H. Robinson from Clemson University.

Senator Thurmond had sent over word that he wanted to present these fine witnesses to the committee. I know he won't object if we proceed to hear you in his absence. He is very busy right now, I know, with matters before the Judiciary Committee.

We want to welcome you to the hearing. Dr. O.J. Dickerson is head of the plant pathology and physiology department of the college of agricultural sciences.

Dr. Robinson is head of the department of agricultural economics and sociology at the college of agricultural sciences.

You may proceed, Dr. Dickerson.

Dr. Dickerson. Mr. Chairman, members of the committee, I appreciate the opportunity to appear here today. I will testify to request continued support of research for peach tree short life disease in South Carolina, which has previously been funded through special grants.

Peach growers in the Southeast, who produce the lion's share of the fresh market peaches for the Eastern United States, suffer the familiar stresses of all farmers today. But additionally, they have been faced with several years of unfavorable weather and rising losses of peach trees from the peach tree short life syndrome. This severe disease is induced by feeding of microscopic eelworms called the ring nematode, which destroys the fine roots of peach trees and renders them susceptible to cold injury or diseases that result in early tree death.

In South Carolina alone, approximately 75 percent of the peach acreage is infested with the ring nematode, and tree losses average about 150,000 trees per year. Now these pests are also significant in other Southeastern States, New Jersey, Michigan, California, and perhaps some other areas.

With current technology, ring nematodes in peach orchards can be controlled only with chemical nematicides, which must be applied both before and after trees are planted. Cost of the treatment is high and rising steadily, now averaging $75 to $100 per acre, and usually must be applied every year. In the current cost squeeze, farmers are unable to afford this large amount of capital, and most have to gamble on tree survival without nematicide treatments.

In previous research, we have studied the effects of microbial agents upon nematode control, refinement of pruning techniques to compensate for nematode parasitism, the role of certain insects in the short life problem, control of soil moisture relationships, and the economics of orchard replacement. Benefits have been derived, and an understanding of the problem has improved substantially.

We now know that we must focus research upon reducing ring nematode population or mitigating their harmful effects if significant progress is to be achieved. To that end, we propose to locate sources of genetic resistance or tolerance to the ring nematode. Now concurrently, possible new nematicides and alternate ways of applying registered materials are continuing to be developed for a short-term method of mitigating losses. Studies involving ground cover plants on which nematodes do not reproduce and may even be reduced also warrants further testing.

Now, this is a brief and even understated summary of the situation and needs relative to an important area of special research, peach tree short life. Results have been good to date, but there is a long way to go. We believe a workable plan has been proposed.

I would like to thank each of you today for the opportunity to speak with you, and I would be pleased to try to answer any questions you may have.

Senator COCHRAN. Thank you very much.

[The statement of Dr. Dickerson follows:]

## STATEMENT OF O.J. DICKERSON

Mr. Chairman, Members of the Committee, I appreciate the opportunity to appear before this committee.

I will testify to request continued support of a research proposed for Peach Tree Short Life in South Carolina which previously has been funded through special grants.

Farmers in the United States are in the midst of an agonizing readjustment to economic stresses resulting from several years of high interest rates, falling land values, declining prices for farm commodities, and smaller markets abroad. Peach growers in the Southeast, who produce the lion's share of fresh-market peaches for the eastern United States, suffer similar stresses but additionally have been faced with several years of unfavorable weather and rising losses of peach trees from the peach-tree-short-life syndrome. This severe disease is induced by feeding of a microscopic eelworm called the ring nematode which destroys the fine roots of peach trees and renders them susceptible to cold injury or diseases that result in early tree death. In South Carolina alone, approximately 75% of the peach acreage is infested with the ring nematode and tree losses average about 150,000 trees per year. These pests are also significant in other southeastern states, New Jersey, Michigan, California, and perhaps other areas.

With current technology, ring nematodes in peach orchards can be controlled only with chemical nematicides which must be applied both before and after trees are planted. Costs of treatment are high and rising steadily, now averaging $75 to $100 per acre, and usually must be applied every year. In the current cost squeeze farmers are unable to afford this large amount of capital, and most have to gamble on tree survival without nematicide treatments.

Various alternatives to help overcome the nematode problem have been studied and progress has been made. As various approaches have been tested, the most viable alternatives have narrowed to three: (1) identification and development of nematode-resistant rootstocks that can be used in peach orchards without the need for chemical nematicide treatments, (2) use of orchard ground cover plants to help suppress nematode populations in peach orchards, and (3) more efficient use of chemical nematicides now available.

### BACKGROUND

In previous research we studied the effects of microbial agents upon nematode control, refinement of pruning techniques to compensate for nematode parasitism, the role of certain insects in the short life problem, control of soil moisture relationships and the economics of orchard replacements as possible solutions to the problem of reducing tree losses. Benefits have been derived and understanding of the problem has improved substantially. We now know that we must focus research upon reducing ring nematode populations or mitigating their harmful effects if significant progress is to be achieved. To that end peach and peach-related plant species germplasm are being tested to locate sources of genetic resistance or tolerance to the ring nematode. Concurrently, possible new nematicides and alternate ways of applying registered materials are continuing to be developed for a short-term method of mitigating losses due to this nematode. Studies involving ground cover plants on which the nematodes do not reproduce, and may even be reduced, also warrants further testing.

This first approach (breeding for resistance) holds the most promise for effective and long-lasting control of nematodes, but it is also a very expensive and time-consuming task. A resistant rootstock would eliminate the need for expensive chemical treatments and would be suitable for use in a wide range of environments. We have screened approximately 150 genetic lines for resistance and found that about 10% of these deserve further testing. A more concerted effort will enable us to test most of the 1000 or more genetic lines available to us. From these, highly susceptible lines will be eliminated and the remainder tested further in laboratory, greenhouse, and field experiments. Within 5 years we should be able to determine whether genetic resistance is possible for control of this nematode, but 10 to 15 years probably will be required before a resistant rootstock is available for use in commercial peach orchards.

This long-term research is worthwhile because millions of dollars in tree losses and costs of chemicals would be saved each year, not only in the Southeast, but also in parts of California, New Jersey, Michigan, and perhaps other localities where this nematode thrives. Moreover, the results would reduce our current dependence upon chemical nematicides which many fear threaten to pollute water supplies and the environment.

## OBJECTIVES

1. Expand current efforts to screen germplasm of peaches and related species for resistance to the ring nematode.
   a. Test in the greenhouse all available breeding lines for susceptibility to the nematode,
   b. Test in nematode-infested soil in the field breeding lines that appear to be resistant or tolerant to the feeding and reproduction,
   c. Develop new laboratory and greenhouse techniques for more rapid and effective procedures for identifying resistance to the nematode,
   d. Study the mechanisms of injury that follow nematode feeding so as to improve understanding of its injurious effects and application of this information to more vigorous peach tree growth and improving longevity.
2. Expand current research to improve peach orchard cover crops to reduce nematode populations and control soil erosion.
   a. Test in the greenhouse additional plants for their suitability as nematode hosts so that the variety of resistant or immune cover crops can be expanded,
   b. Expand field tests of nonhost plants to examine their potentially beneficial influences on suppressing the nematode population.
3. Study ways to utilize chemical nematicides more effectively in the field, and the behavior of such materials in peach roots.

## GENERAL PROCEDURES

1. Resistant germplasm for peach rootstocks.
   Many sources of breeding material have been collected at Clemson University; the USDA Southeastern Fruit and Tree Nut Research

Laboratory, Byron, GA; North Carolina State University; and other cooperating agencies. If possible, all of these materials will be tested in the greenhouse to determine whether the ring nematode can reproduce on them. If potential resistance is found in these tests, the prospective breeding material will be grown in infested soil in the field to study growth, longevity, and horticultural characteristics necessary for a suitable peach rootstock. These materials would form the nucleus for a breeding program to incorporate resistance into commercial peach rootstocks.

In other tests, plant responses to nematode feeding will be assayed to detect sensitive markers that might be used in breeding programs to predict varying degrees of sensitivity of plants to nematode feeding. Responses to be studied will include ethylene production in response to feeding, plant hormone responses, and heat shock proteins. Success in these tests would considerably streamline otherwise laborious, time- consuming procedures that now are necessary to detect nematode resistance in peaches. In the process, important fundamental information about effects of nematode feeding will be developed.

2. Orchard cover crops

   Presently, potential nonhost plants that might be used in peach orchards are being studied in the greenhouse and in small-scale field plots. Peach seedlings are interplanted with nonhost plants and the effects upon tree growth and nematode reproduction are being studied. In the spring of 1986, similar experiments will begin in small-scale field tests. The objective is to identify plants that will not interfere with peach tree growth and development while helping to reduce the nematode population. They also must be compatible with farming practices. From plants being tested, selections will be made for larger scale tests in orchards similar to those in commercial use.

3. More efficient use of chemical nematicides

   Application of nematicides through irrigation systems has the advantages of efficient use of introducing the chemical almost directly into the root zone and can be easily regulated as to the exact amount applied and the fraction of the root zone treated. As of now we do not know how much of the root zone needs to be treated. In this objective, nematodes will be allowed to feed upon different fractions of the root zone and the plant response measured. Likewise, fenamiphos nematicide will be applied to a fraction of the root zone and movement to other portions of the roots will be assayed. These experiments will enable us to determine the fraction of the root zone necessary for protection against nematodes, and enable us to advise growers more intelligently about the proportion of the soil surface that must be treated with chemical nematicides whether applied through irrigation or other means.

## PROSPECTS FOR SUCCESS

It is imperative to screen available germplasm for sensitivity to ring nematodes because this information is essential for development of new rootstocks and the planting of self-rooted peach trees in nematode-infested soil. Highly susceptible varieties cannot be expected to survive long in such sites. Therefore, regardless of whether a highly resistant rootstock can be developed, this portion of the proposed research is certain to pay dividends. On the other hand, we have no certainty at this time that a good source of resistance can be found in peach breeding stock, and it may be 2 or 3 years before this question can be answered with certainty.

The proposed investigation of ground cover crops may or may not succeed in locating a suitable cover crop that can be used to help suppress nematodes. Since our previous research funded by the special grants we received showed that nematodes can reproduce on our two most common cover crops (perennial ryegrass and tall fescue), we urgently need replacements that are not hosts for the nematode. This research will provide that information.

There is less certainty of economic returns to the proposed adjustments to chemical nematicide treatments, but in the interests of environmental concerns about chemicals it is essential to be able to apply chemicals with utmost efficiency. Even if rates of materials cannot be reduced, it is essential to have this information available.

### STATEMENT OF DR. ROBINSON

Senator COCHRAN. Dr. Robinson, you may proceed with your presentation.

Dr. ROBINSON. Thank you, Mr. Chairman. I do appreciate, as Dr. Dickerson stated, the opportunity to appear before your committee and speak on behalf of a project that I believe, and many of us believe, to be important to agricultural adjustment in the Southeast. I presented a detailed version of the testimony, thus I will this afternoon hit only a few of the highlights.

The project to which I refer is entitled "Agricultural Adjustment in the Southeast Through Alternative Cropping Systems." This project was funded for the first year in fiscal year 1985, and I am here to testify in support of continuing funding for the third year of the project.

The funds sought under a special competitive grant are to be used to augment efforts already underway, and efforts that were underway for quite a few years in three southeastern universities: Clemson University, North Carolina State University, and the University of Georgia. These three universities had begun work, but the funds provided allowed them to band together to expand that work to seek needed solutions that will help southeastern farmers adjust to the changing economic conditions and a changing farm policy environment.

As you well know, economic conditions are unfavorable for farmers, with no apparent relief in sight, and farmers are searching for ways to adjust to a changing environment and survive. In fact, many farmers and farms will not survive this crisis.

But we have a basic responsibility to assist farmers through this adjustment period and to help preserve the basis of our food and fiber system. We at the land-grant universities are reallocating our resources to address these critical problems according to the original and continuing land-grant charge. However, our resources are often insufficient to meet the need, and we are seeking your support to aid in our efforts to seek alternatives and provide information and analysis required for farmers to make wise and prudent decisions as they seek to survive.

In the absence of sound analysis and information, we fear that incorrect and costly decisions based on poor analysis could exacerbate the current financial crisis and lead to further trauma in the agricultural sector. Studies conducted in many States indicate that the situation continues to deteriorate with an increasing number of farm bankruptcies. A large proportion of farms are having debt repayment problems, particularly medium-sized family farms. Agricultural credit institutions are also experiencing this trauma.

Continued survival of agriculture in the Southeast, which is characterized by a large number of relatively small farms, is dependent upon the extent to which the industry can adjust.

Adjustment to changing economic conditions in the farm and rural sector is not new to the South. It has changed many times from king cotton, and from other commodities extremely important to the South.

### COMPARATIVE ADVANTAGE IN SOUTHEAST

Economic risk could possibly be reduced by not depending on traditional crops, but by changing to systems that include new crops with viable markets. It appears that the Southeast could have a comparative advantage in the production of selected horticultural crops.

For example, the high level of management necessary for tobacco could be used also for horticultural crops. On small and part-time farms, labor is often available in relative abundance and is often underemployed. The climatic conditions are amenable to multiple cropping systems, and the Southeast is close to population centers that are growing day by day. Many farms with irrigation want to produce high value crops to help finance their irrigation system. And widespread nutritional literacy is resulting in an increased demand for vegetable products.

All of these factors are favorable to expanded vegetable production. The three States are trying to seek solutions and provide information to farmers and agribusiness in those adjustments. The objectives of the project are to identify commodities which have the most potential for expansion; to develop production practices and determine the feasibility of competitively producing specific vegetable crops on family farms in the three States; and to evaluate alternative markets and, in turn, disseminate this information to farmers.

Field trials are being conducted, and we are in the first year of full field trials for the horticulturists at the various experiment stations. There are 10 crops and cropping systems that are being evaluated in the three States in many climatic conditions, which then provided the basis to look at the types of vegetables which have biological feasibility in the diverse climates of the three-State area and the southeastern region.

Models are being developed to look at market structure that is available for marketing the commodities produced, and the types of market expansion and facility expansion that would be needed to accommodate a larger supply of vegetables. Models are being developed to help farmers directly apply computer technology and specific information arising from this project to make on-farm decisions of what crops are more profitable for them and their particular situation.

Every opportunity has been seized to provide information on alternative crops to the industry and agriculture as quickly as possible. Extension training videos, statewide meetings, and professional seminars have been developed to disseminate information, and there has been considerable interest shown by scientists and others in the project. Scientists from many States are participating or looking at the information generated and will be participating in a field day this summer.

Many of the research results are transferable to other States beyond the southeastern region.

Again, I thank you for the opportunity to speak here today. Thank you for the support of this project by the committee, and we hope that you will see fit to continue to support it.

Senator COCHRAN. Thank you very much, Dr. Robinson and Dr. Dickerson. We appreciate your being here.

[The statement of Dr. Robinson follows:]

## STATEMENT OF B.H. ROBINSON

Mr. Chairman, Members of the Committee, my name is Bob Robinson and I am Head of the Department of Agricultural Economics and Rural Sociology at Clemson University. I appreciate the opportunity to appear before this committee and speak on behalf of a project important to agricultural adjustment in the Southeast.

The project to which I refer is entitled, "Agricultural Adjustment in the Southeast through Alternative Cropping Systems." This project was funded for the first year during FY 1984/85, and I am here to testify in support of a third year's funding in the amount of $450,000 for this important effort. The funds sought under a special competitive grant are to be used to augment the efforts underway in three Southeastern Universities (Clemson, N. C. State, and Georgia) to seek solutions that will aid Southeastern farmers adjust to changing economic conditions and a changing farm policy environment.

Economic conditions are unfavorable for farmers with no apparent relief in sight. Farmers are searching for ways to adjust to a changing environment and survive. Many farms will not survive, but we have a basic responsibility to assist farmers through this adjustment period and to help preserve the basis of our food and fiber system. We at the Land Grant Universities are reallocating our resources to address these critical problems according to the Land Grant charge. However, our resources are insufficient to meet the need and we are seeking your support to aid in our efforts to seek alternatives and provide information and analysis required for farmers to make wise and prudent decisions as they seek to survive. In the absence of sound analysis and information, we fear that incorrect and costly decisions based on poor analysis could exacerbate the current financial crisis and lead to further trauma in the agricultural sector.

The remainder of my remarks will be addressed to the current situation, the importance of our proposed research and educational effort, how the results will help farmers, and accomplishments and future directions of the project.

Agriculture continues to experience a financial crisis unparalleled since the Great Depression. High production costs, declining commodity prices, weak demand, high debt loads, and growing commodity stocks have resulted in serious cash flow problems for farmers. Studies conducted in many states indicate that the situation continues to deteriorate with an increasing number of farm bankruptcies. A large proportion of farms are having debt repayment problems, particularly medium sized family farms. Agricultural credit institutions are also experiencing financial losses and are threatened by the current problems.

The financial situation in South Carolina and the Southeast is in no better condition than that of the rest of the U.S. In fact, the situation may be worse because of lower yields and higher production costs in the Southeast. Major field crops in South Carolina have not been very profitable for even the above-average farmers in the 1980's. Farmers with average yields have not broken even in the past few years.

As in the past, farmers in the Southeast are searching for ways to adjust to the changing economic environment. For a number of reasons, horticultural crops are viewed as alternatives to traditional crops and could help reduce risks and improve income levels. Land, labor, capital and management all favor an increase in vegetable production in the Southeast. Land suitable for the production of vegetable crops is available, and labor is often underemployed. There is a surplus of labor in many rural areas because of the mechanization of many crops. Vegetable enterprises offer an alternative which could increase the income of both farmers and laborers.

Southeastern farmers have invested in irrigation systems in an effort to become more competitive in the production of crops such as corn and soybeans. Many farmers are finding it difficult to cover the added costs of center pivot irrigation systems and are searching for high value crops which can be multiple cropped with traditional crops within a single season. It appears some vegetable crops produced under irrigation would increase net returns and improve the cash flow of farms.

The Southeast could have a comparative advantage in the production of some horticultural crops. For example, the high level of management necessary for tobacco could also be used for horticultural crops in a double cropping situation. Soils are such that they should be capable of producing yields comparable to many of the current primary horticultural producing areas of the nation.

Historically, the Southeast has produced vegetables and small fruits. However, research is needed to develop improved varieties and production procedures to realize the higher yields possible in the Southeast. With a few exceptions, such as pickling cucumbers, tomatoes, and sweet potatoes, production has been primarily for fresh market and directed mostly to local consumption.

Population is increasing throughout the Southeast, and the area is a deficit producer of most vegetable and small fruit crops. If the production of vegetable crops is to be expanded, there is a critical need for research to evaluate production systems and marketing alternatives associated with processing and with increased sales in the population centers of the Eastern U.S. The development of a vegetable processing industry would also produce added value and stimulate employment in the region.

The nutritional consciousness of consumers and an increasing population is resulting in an increased demand for vegetables. The basic question is how competitive can the Southeast be in the production of vegetables and which vegetables appear to be most competitive?

The states of Georgia, North Carolina and South Carolina have joined together in a research and education effort to provide the agricultural sector with needed information on the economic and biological potentials for producing and marketing certain varieties of vegetables. The objectives of the project are:

1. Identify commodities which have the most potential for expansion.
2. Develop production practices and determine the feasiblity of competitively producing specific vegetable crops on family farms in the three state region;
3. Evaluate alternative markets for new and expanded production of selected horticultural crops, including international markets;
4. Develop and disseminate specific recommendations on expanded production of vegetable crops.

Field trials are being conducted at seven primary sites by horticulturalists of the three Land Grant Universities. Profitability and market analysis is being conducted by agricultural economists from these institutions.

The research is oriented toward providing farmers and agribusinesses timely information on vegetable production and marketing opportunities. Information forthcoming from the research will be directly applicable to farm situations so that the adoption and adaption of the production and marketing systems should be relatively straightforward. The potential gains to farmers are great. If it appears that certain crops can be produced and marketed profitably during a window within the season, it should augment farm income. Any estimate of the amount that farm income would increase is only speculation at this stage of the research. However, if farm income increased by $100 per acre as a result of producing vegetables, it would require only 10,000 acres to amount to a one million dollar gain for the region. This is indeed a small acreage when one realizes that one percent of the soybean acreage in the three states amounts to more than 60,000 acres. In addition to the farm sector, there are potential gains to the transportation and handling sectors and perhaps the processing and agricultural supply sectors. Fruits and vegetables have one of the highest "value added" multipliers in the agricultural sector.

It is important to note that both production possibilities and marketing possibilities are being considered simultaneously. If markets are available but production is not economically feasible or vice versa, the crop will not be considered further. The close working relationship from production through marketing provides both farmers and agribusiness firms a much better idea of the biological and economic feasibility of producing certain vegetable crops during the season.

Field research began during the summer of 1985. Thus far, horticulturalists have evaluated 10 crops and cropping systems for one growing season. Different varieties are being tested and new production practices are being developed for each crop under diverse growing environments and alternative growing seasons to minimize weather stress, especially as it impacts the financial returns. The market window research underway indicates time periods within the production/marketing season when there is an opportunity to sell at a profit -- providing the producer is able to obtain sufficiently high yields and quality. Research at the seven sites is providing the production possibilities data. For example, tentative results indicate that "fall cucumbers" can be profitably produced in the Fletcher, N. C. area. This "market window" research indicates that during September and October the price for cucumbers has averaged about $7.00 per bushel. During this time period, the climate and soil conditions at Fletcher will result in approximately 220 bushels of cucumbers per acre for certain varieties under good management. This is more than twice the yields at the other locations for this season of the year. The projected income above variable costs is $300 per acre. Refined models are in the process of being developed and tested for bell peppers and cabbages. This type of analysis will be conducted for other vegetable crops as time and funding permit.

A structural analysis of vegetable markets is being conducted to determine the characteristics of marketing firms and how new vegetable suppliers can develop to meet these characteristics. Twenty-six handlers in South Carolina, 80 handlers in North Carolina and 68 handlers in Georgia have been interviewed. This information is being used to classify firms according to the functions they perform; how, when and where they operate; and their size relative to other firms and the market as a whole. Information relating to the commodities handled, source of supply, and markets used by these firms are being summarized. In addition, the potential capacity to handle expanded production in the three state area is being evaluated. The research will also provide an indication of the needed expansion in facilities and marketing channels to accommodate expanded production. Farmers must have an outlet for their produce that is both dependable and "fair".

Background information has been assembled on international markets for vegetables. A questionnaire was sent to a comprehensive list of East Coast firms exporting U.S. vegetables. Responses are being analyzed to determine potential demand. Over 2,000 firms importing vegetables were also surveyed. Responses are fairly well complete and the analysis is underway to estimate the future demand for vegetables by areas of the world.

Two computer models are being constructed at the vegetable producer level. One is designed to help the producer analyze alternative crops in budget format and select those crops maximizing expected income. The model will allow researchers, extension faculty and farmers to perform "what if" analyses by changing costs, prices or restrictions and evaluate their impact on total net farm income. The second computer model is designed to indicate the cropping pattern yielding the maximum net returns to producers within the three state region. Thus, it takes into account interactions between areas. Both models are in the development stage and require considerable amounts of biological and economic data.

There has been an effort to disseminate information on alternative crops to interested farmers, agribusinesses, community planners and leaders as soon as possible. Most of the results thus far are based on a one-year production cycle which is too short a period upon which to base many recommendations. However, there have been numerous presentations before farm groups, five field days and numerous newspaper interviews and articles concerning the project and its results. Two video tapes on sequential cropping systems and plastic mulch cultural practices have been developed for instructional use by Agricultural Extension Agents. Three statewide farmer field days have been planned (one in each state at a research site) for the summer of 1986. This will be a cooperative effort. Researchers from all three states will conduct the field days.

There has been considerable interest shown by scientists and others in this project. Scientists from Kentucky and Virginia have been invited to meet with the North Carolina, South Carolina, and Georgia scientists at the semi-annual meeting in May. This should be helpful to the scientists in all states as they consider alternative crops. Many of the research results are transferrable to other states.

## Congressional Witness

### STATEMENT OF HON. STROM THURMOND, U.S. SENATOR FROM SOUTH CAROLINA

Senator Cochran. I have a statement that Senator Strom Thurmond sent over, which we will include in the record. As a matter of fact, he is here now and he can put it in the record himself.

First, however, let me just congratulate you for the thought that you have given to this presentation. The work in peach tree research is one that is brought to my attention every year by the distinguished Senator from South Carolina, Senator Thurmond, whom we welcome to the committee.

I must say that I do not think you could have a stronger advocate for the research work that is done there at Clemson University than

Senator Thurmond. He always points out the importance of this to the State of South Carolina and to the economic well-being of many of the citizens of his State.

I have to sympathize with it because in the area of Mississippi where I live and where I grew up, I had relatives who had peach orchards and I'm familiar with some of the difficulties that someone who is trying to operate an orchard has in dealing with pests and diseases and early frosts and things of that kind. It can be devastating. With added research and knowledge and technology, we can better deal with some of those problems.

Let me stop at this point and recognize Senator Thurmond. These men from Clemson University have made their presentation, and we appreciate having had the benefit of their help at the hearing today. We recognize you, Senator Thurmond, for any comments you may have.

Senator THURMOND. Thank you very much, Mr. Chairman. I feel honored to be here before such an able and distinguished chairman and other members of the committee.

Gentlemen, I would like to thank you and other members of this subcommittee for this opportunity to express my views on the importance of certain agricultural programs to our Nation.

Many individuals do not consider agricultural produce a high-technology or high-value-added good. However, it is our ability to apply new technology to our agricultural processes, and thereby add value to our products, that has enabled American agriculture to compete with foreign farmers in both domestic and foreign markets. This ability stems from a dedication to agricultural research, the distribution of this knowledge to American farmers, and the willingness to assist our farmers in developing the infrastructure necessary to support a modern, competitive agricultural sector.

### RESEARCH PROGRESS IN THE SOUTHEAST

Today, I would like to focus on several programs which prepare farmers to cope with new technology, increasingly specialized markets, and foreign competition. In my home State of South Carolina, the Agricultural Experiment Station of Clemson University has conducted many valuable research programs in order to improve the economic condition of farmers, and to aid in providing reasonably priced, quality food and fiber commodities to the public.

Professors at the Clemson Experiment Station have recently made great progress in their study of the peach tree short life syndrome. This deadly disorder strikes young peach trees and can be economically devastating to the peach tree grower. Their research advancements have assisted in the prevention of this problem. However, the total eradication of peach tree short life syndrome will require further research.

North Carolina State University, the University of Georgia, and Clemson University are involved in a cooperative program known as alternative cropping research. The goal of this program is to increase and stabilize farm income in the Southeast through development of alternative crops suitable to that region.

These experiment stations also work with farmers to control and eradicate pests such as witchweed, a parasitic weed; the boll weevil; the fire ant; and the pine beetle.

Agents from the agricultural Extension Service educate farmers and other rural citizens on topics such as pest control and food nutrition. The Soil Conservation Service helps farmers preserve their land for future productive use.

The Rural Electrification Administration provides the farmer and those in rural communities with low-cost loans so that those individuals may benefit from the amenities and utilities that are taken for granted in more urban areas.

These programs improve the competitiveness of the American farmer, and also the quality of life in rural America. We should maintain funding for these vitally important programs if we are to have a strong agricultural economy.

Mr. Chairman, I would like to welcome the three gentlemen from South Carolina who have discussed two important research projects: peach tree short life research, and the alternative cropping research programs. Dr. Joe Dickerson is head of the Plant Pathology Department at Clemson University. He has been involved in the peach tree short life research program since its inception.

Dr. Bob Robinson is head of the Department of Agricultural Economics and Rural Sociology in the College of Agricultural Sciences at Clemson University. He is one of the initiators of the alternative cropping research program. Dr. J. Edwin Faris, a professor of agricultural economics and assistant to the dean of agriculture at Clemson University is not only a fine teacher but also a distinguished agricultural economist. His many published works attest to his expertise. Dr. Faris is the project coordinator for the alternative cropping research program.

Mr. Chairman, I appreciate your allowing these gentlemen to address the subcommittee today, and I am confident their testimony will be beneficial to you and the other committee members in your efforts to prepare the fiscal year 1987 Agriculture, Rural Development and Related Agencies appropriations bill.

I want to thank you very much again, and I want to commend you for your outstanding leadership on behalf of the farmers of America. You have done a fine job and we are very proud of it and just wanted you to know it.

I also want to thank the able Senator from Georgia for his interest in the farmers and what he is doing to help them, too.

### ALTERNATIVE CROPS

Senator COCHRAN. Thank you for taking time to be here, Senator Thurmond. We appreciate your kind remarks and your help to our subcommittee.

Let me just say, Dr. Robinson, that your proposal to look at alternatives to traditional land use in the Southeast is something that I think could not be more timely. We are finding many of the traditional land uses are uneconomical, are not bringing in the level of profit to justify the continued growing of certain crops.

Marginal lands are one problem. They are just not as productive as they once were, and I think this is an important area of inquiry. I hope that you can come up with some guidance and assistance for landowners. We are working in our State to try to identify better uses of land for small landowners.

We do not have, in the eastern section of our State particularly, the large tracts of land that are suitable for cotton or some of the other crops. They used to be, but no longer are they suitable to cotton because the yields just are not there to justify the planting of those lands to cotton. Now we are finding that soybean lands are no longer productive enough to justify the planting of land to soybeans.

We are exploring with blueberries. We are exploring the possibility of cantaloupe production; putting in vineyards of muscadines, traditional indigenous grapes, to work to try to make those lands productive. But research is needed, there is no doubt about it. Assistance is needed to those landowners to make this turn into a productive and economically feasible use of our lands.

I do not know how much money we will be able to make available to projects of this kind, but they are certainly worthwhile. I am convinced that we have to do more work in this area, particularly in the Southeastern United States.

Senator Mattingly, do you have any questions or observations of these witnesses?

Senator MATTINGLY. No, not at this time.

Senator COCHRAN. We appreciate your being here, and I am going to turn the hearing over to Senator Mattingly now. He will preside for the balance of the agenda that we have before the committee today.

Thank you so much for being here.

Dr. DICKERSON. Thank you.

[The statement of Senator Thurmond follows:]

## STATEMENT OF SENATOR THURMOND

I would like to thank you and the other members of this Subcommittee for this opportunity to express my views on the importance of certain agricultural programs to our Nation.

Many individuals do not consider the American agricultural product a high-technology or a high value-added good. However, it is our ability to apply new technology to our agricultural processes, and thereby add value to our products, that has enabled American agriculture to compete with foreign farmers in both domestic and foreign markets. This ability stems from a dedication to agricultural research, the distribution of this knowledge to American farmers, and the willingness to assist our farmers in developing the infrastructure necessary to support a modern, competitive agricultural sector.

Today, I would like to focus on several programs which prepare farmers to cope with new technology, increasingly specialized markets, and foreign competition. In my home State, the South Carolina Agricultural Experiment Stations of Clemson University have conducted many valuable research programs in order to improve the economic condition of farmers and to aid in providing reasonably priced, quality food and fiber commodities to the public.

### PEACH TREE SHORT LIFE RESEARCH

Peach tree short life refers to the premature death of peach trees which results primarily from root system damage inflicted by various nematodes. Prior to 1979, farmers were able to successfully limit nematode populations with use of the soil fumigant DBCP. However, DBCP use has been banned since 1979, and no effective replacement is available. It was for these reasons, together with the importance of the peach industry to the Southeast, that Congress first funded research in 1981 to combat the peach tree short life problem.

This research has been successful in further identification of the causes of peach tree short life. In addition, a variety of economically viable horticultural practices have been identified which lessen the incidence of premature death in nematode-infested peach trees. However, much remains to be done, and it cannot be done without continued funding.

### ALTERNATIVE CROPPING RESEARCH

Mr. Chairman, another high-priority research program being conducted by Clemson University, in conjunction with North Carolina State University and the University of Georgia, is aimed at increasing and stabilizing farm income in the Southeast through development of alternative crops suitable to that region of the Country. This particular research program offers hope for Southeastern farmers, and I strongly urge that it receive continued funding.

With alternative cropping, "one-crop" farmers can diversify. They can use their land, machinery, and labor resources to earn additional income and protect themselves from seasonal problems peculiar to any one market or location.

### THE WITCHWEED PROGRAM

Turning to another matter, Mr. Chairman, as you may know, witchweed is a parasitic foreign weed found in the United States only in parts of North and South Carolina. Witchweed parasitizes the roots of certain grassy plants including corn and sorghum, sapping nutrients and moisture from the host plant and drastically reducing yield.

The Animal and Plant Health Inspection Service of the USDA has had to quarantine areas of North and South Carolina because of the infestation of this parasite. The witchweed eradication program conducted by the USDA has eliminated the weed from many areas of these states. The witchweed plant, however, has infested new counties in North and South Carolina.

Mr. Chairman, although the USDA has been very successful in removing witchweed from infested areas, much work remains to be done. Efforts to eliminate this parasite should continue until success is achieved. Accordingly, Mr. Chairman, I request that the Subcommittee continue the funding for this important program at the Fiscal Year 1986 level of spending.

## THE BOLL WEEVIL ERADICATION PROGRAM

The Boll Weevil Eradication Program involves the cotton crop, which is of major significance to the economy of the Southeastern United States.

The Boll Weevil Eradication Program is a cooperative effort involving the United States Department of Agriculture and cotton growers. The farmers pay for 70% of the program and the USDA provides funding for the other 30% of the program's expenses. The program has succeeded in eradicating this troublesome pest from Virginia and most of North Carolina. Efforts are now concentrated on South Carolina and Georgia. Once the boll weevil has been completely eliminated from a State, the farmers will continue to support a maintenance program to keep the boll weevil from returning to the infestation-free areas.

The elimination of the boll weevil from the entire Southeast is critical to the economic survival of cotton farmers in our region. These farmers are anxious to continue this program and have given it their financial support. Mr. Chairman, I sincerely hope the Subcommittee can find sufficient monies to continue funding of the boll weevil program at its current level.

## RED IMPORTED FIRE ANT CONTROL

As you may know, the red imported fire ant (RIFA) is a small poisonous ant which can be harmful to humans and animals. These prolific pests have a venomous sting that paralyzes other insects. Although one bite is not deadly to large animals, many bites can maim or kill.

These pests have migrated and multiplied from South America into the Southern United States. Although eradication of the RIFA is now thought to be impossible, it is possible to control further infestation. In order to do so, however, the USDA must continue to study the RIFA and work with farmers to contain the spread of this dangerous pest.

## THE SOUTHERN PINE BEETLE

A swarm of southern pine beetles is capable of completely destroying thousands of trees within a relatively short period of time. The impact on forest owners can be tremendous. These farmers lose their investment in the trees which are infested, and also surrounding forest that must be cleared to contain the pest. The South Carolina State Forester estimates that between $25 million to $30 million of trees will be lost in 1986 alone due to pine beetle infestation. Pine beetles in wilderness areas spread unchecked. As with the fireant, we must work to control the spread of these pests, before they further threaten one of our most valuable natural resources, our forestland.

For the last eleven years the United States Forest Service has conducted the Integrated Pest Management, Research and Development and Application Program for Bark Beetles of Southern Pines. Despite the past success of this program, a recent outbreak of pine beetles has been accelerating rapidly through Georgia and South Carolina.

Although continuation of the Integrated Pest Management program may not be feasible at this time, I urge the members of this Subcommittee to keep in mind the recent outbreak of this pest and consider either a new program for the future or, at the least, continued related research on the pine beetle.

## THE SOIL CONSERVATION SERVICE

Mr. Chairman, today I would also like to address the funding of another important government function, the Soil Conservation Service. The goal of this agency is to protect and preserve our valuable soil and water resources. The maintenance of arable land and abundant water supplies is vital to our entire economy. Since the Soil Conservation Service was created in 1935, the agency has worked to conserve and replenish these precious resources for use by future generations.

Mr. Chairman, in my judgment, we simply cannot afford to eliminate or too drastically cut funding for this agency, which provides invaluable technical services to farmers and coordinates its conservation efforts with state and local governments. Our soil and water resources are crucial to our survival and must be wisely managed.

## AGRICULTURE EXTENSION SERVICE

The Agricultural Extension Service is a critical link in the agricultural educational system of our Nation. Through this valuable service, Colleges and Universities share their vast knowledge of agricultural concerns to rural citizens and others who benefit from this assistance.

Extension Service programs cover a wide range of services, from scientific subjects, such as pest control, to nutrition. For instance, through the Extension Service, County agents in the Food and Nutrition Education Program (EFNEP) help low-income and elderly individuals improve their diets. This preventive medicine reduces the health costs of our Nation and improves the quality of life for many Americans. Disproportionate cuts in these program areas would deprive these citizens of services that help people to help themselves.

I urge you to maintain the funding for this program at fiscal year 1986 levels.

## RURAL ELECTRIFICATION ADMINISTRATION

Mr. Chairman, I would also like to take this opportunity to encourage members of this Subcommittee to support continuance of the Rural Electrification Administration direct loan, and loan guarantee programs. These programs have been of tremendous assistance to rural communities all across our Nation.

Termination of these important programs would result in higher rates for electric and telephone services, thereby lessening the quality of life in rural America. The impact would be greatest upon the farmer, who already is suffering great economic hardships.

These programs improve the competitiveness of the American farmer and also the quality of life in rural America. They are necessary for a strong agricultural economy.

Again, Mr. Chairman, I urge that the members of this Subcommittee do all they can in the fiscal year 1987 appropriations process to ensure that funding for these vitally important programs is not disproportionately reduced or eliminated.

## INTRODUCTION OF SOUTH CAROLINA WITNESSES

Mr. Chairman, I would like to introduce three gentlemen from South Carolina who will discuss two important research projects: Peach Tree Short Life Research and the Alternative Cropping Research programs. Dr. Joe Dickerson is Head of the Plant Pathology Department at Clemson University. He has been involved in the Peach Tree Short Life Research Program since its inception.

Dr. Bob Robinson is Head of the Department of Agricultural Economics and Rural Sociology, in the College of Agricultural Sciences at Clemson University. He is one of the initiators of the Alternative Cropping Research program. Dr. J. Edwin Faris, a professor of Agricultural Economics and Assistant to the Dean of Agriculture at Clemson University, is not only a fine teacher, but also a distinguished agricultural economist. His many published works attest to his expertise. Dr. Faris is the project coordinator for the Alternative Cropping Research program.

Mr. Chairman, I appreciate your allowing these gentlemen to address the Subcommittee today, and I am confident their testimony will be beneficial to you and the other Committee members in your efforts to prepare the Fiscal Year 1987 Agriculture, Rural Development, and Related Agencies Appropriations Bill.

## Baylor College of Medicine

### STATEMENT OF BUFORD L. NICHOLS, JR., DIRECTOR, CHILDREN'S NUTRITION RESEARCH CENTER

### ACCOMPANIED BY D. GAYLE McNUTT, DIRECTOR OF COMMUNICATIONS

Senator MATTINGLY [presiding]. Dr. Nichols.

Dr. NICHOLS. I am Dr. Buford Nichols, the scientific director of the Children's Nutrition Research Center, and this is my colleague, Gayle McNutt, who represents the administration of Baylor College of Medicine.

Senator MATTINGLY. We welcome you to the committee today. Could you pull the microphone a little bit closer to you?

Dr. NICHOLS. Is that better?

Senator MATTINGLY. That is much better. I can hear you now.

Dr. NICHOLS. It is a pleasure to be with you, again, and we want to thank this committee for its continuing leadership and encouragement in the full development of research programs to address the nutritional needs of mothers and their children.

We had a very nice increase in our operating budget this year. It is already implemented. We are underway with the construction of a permanent facility. This should be completed by 1987. So we are here to say that we would like to continue the increase in the operating budget. We would like to have the center fully operational by 1990.

One particular issue that I want to address is the need to establish a program to study the nutritional needs of pregnant women. We have been concerned about this program since 1980.

One of the costs of health care in the United States is the cost of care of premature infants. It accounts for about $10 billion a year. We know that there are segments of our population where the incidence of prematurity is only about 3 percent. There are other segments where it is 10 percent higher than that.

If we could reduce the incidence of low birth weight only 10 percent, through better nutritional intervention, we think we could save the taxpayers of the United States something like a half a billion dollars. And that is not a large improvement, 10 percent.

So we feel that we are in a position to move out on this program. We think it has long-term implications. It is especially important because it addresses the population, as a whole, that is not reached through the medical segment of our Government's programs. So we would hope that the time has come to move along, to establish the program on nutritional needs of pregnant women and their unborn infants.

Thank you very much for allowing me to speak before the committee today. I wonder if there are any questions relating to the program or to the human nutrition centers that are run by the Agricultural Research Service?

Senator MATTINGLY. Dr. Nichols, I do not believe I have any questions. Maybe Senator Burdick does, but I really appreciate your comments. Your appearance before the committee does help reinforce what we are trying to do here, and I am glad to see that you are satisfied with what we are trying to put in the budget. I know that members of this committee will do everything possible to try to fund these programs as they have been set up for fiscal year 1987.

We do appreciate your comments.

Senator Burdick.

Senator BURDICK. I have no questions at this time.

Dr. NICHOLS. Thank you again.

[The statement of Dr. Nichols follows:]

## STATEMENT OF BUFORD L. NICHOLS, JR.

The Children's Nutrition Research Center is the nation's only facility dedicated to the scientific definition of the nutritional needs to ensure health in pregnant and lactating women, and in children from conception through adolescence.

The Center is operated by Baylor College of Medicine and Texas Children's Hospital in cooperation with the USDA's Agricultural Research Service.

Research is designed to support the goals of the Department of Agriculture by developing national standards to:

- Determine how the diet of a pregnant women affects her health and that of the child she delivers.
- Determine how the mother's nutrition affects lactation, the content of her milk, and the health of the child she nurses.
- Determine the relationship between nutrition and physical and mental development.
- Define dietary needs for healthy growth and development during childhood.
- Develop safe and effective methods for nutrition research.
- Define standards for the nutritional assessment of children, and pregnant and lactating women.

### CURRENT ACTIVITIES

Five research programs supporting the Center's goals have been approved by the Council of Scientific Advisors (composed of nutrition scientists) and the Executive Committee (composed of government and institutional advisors).

These programs have been included in the Cooperative Agreement between Baylor College of Medicine and the Agricultural Research Service. Currently, research is being conducted in two programs and two laboratories.

### Lactation Program

Studies in the Lactation Program concentrate on dietary needs of lactating women and on the special properties of human milk that promote the growth and development of the normal infant. Researchers have studied the nutrient compositions, physical properties, and immunological factors of human milk. Research also has been conducted on the quality and quantity of milk required for healthy growth in infants.

Studies on the relationship between nursing women and their infants have resulted in an education program for the USDA's Women, Infants and Children's (WIC) Program. Health care workers are now trained to assist new mothers who breast-feed their infants.

### Weaning Program

The Weaning Program is providing solutions to problems that occur when foods other than breast milk are added to the infant diet. Initially, cereals are being studied. The ways in which foods affect the infant's digestive organs are also under investigation. Human milk appears to promote growth of these organs, while alternative foods do not.

Baby foods and formulas seem to cause illness in some infants. The results of these studies are designed to establish dietary recommendations for feeding infants during weaning.

### Stable Isotope Laboratory

The Stable Isotope Laboratory makes it possible to do nutrient studies in normal infants and mothers. Stable isotopes are natural substances in foods that can be used as tracers to follow nutritional processes in the human body. Investigators in the Stable Isotope Laboratory have developed ways to determine the nutrients required to produce human milk. Methods for determining the lean body mass and the percent of body fat also are being developed. Studies to determine the body's use of different types of foods are being conducted using nutrients labeled with stable isotopes.

## GROWTH LABORATORY

Research in the Growth Laboratory is focused on how the diet affects the development of the body. Standard and complex techniques are used for assessing body composition and its relationship to nutrition in infants, adolescents, and pregnant and lactating women.

## REQUEST FOR ADDITIONAL APPROPRIATIONS

### Pregnancy Program

The proposed Pregnancy Program is designed to study the nutritional needs of pregnant women and to determine how the diet affects the health of mothers and their children. The addition of this program will complete the Center's commitment to maternal and infant nutrition research from conception through infancy.

There has been a progressive fall in the infant mortality rate in the United States during the past 100 years. At the time of the founding of the U. S. Department of Agriculture in 1862, infant mortality averaged 150 to 1,000 live births. Today, infant mortality is less than 12 to 1000 live births. About two-thirds of the present infant mortality in the United States is due to low birthweight. Twelve nations have lower infant mortality rates than the United States because they have a lower incidence of low birthweight deliveries. The incidence of prematurity is 12% in the public hospital in Houston and 3.5% in the private hospitals. It is well-established that supplementary feeding programs during pregnancy reduce the incidence of low birthweight. The purpose of the Nutrition and Pregnancy Program is to address the ways in which an improved diet can reduce the number of low birthweight infants. Such a program would be cost-efficient. More than $5 billion a year is spent on hospital care for low birthweight infants in this country. A 10% reduction in the incidence of low birthweight infants will reduce costs to the taxpayers of one-half billion dollars. The research results necessary to launch a national program to prevent low birthweight are within the reach of the Children's Nutrition Research Center and within the mission of the U. S. Department of Agriculture.

## THE BRAIN AND BEHAVIOR PROGRAM

The proposed Brain and Behavior Program will study the effect of the diet on mental development and performance in children. Preliminary data indicate that diet influences brain development and mental performance in infants and children. A reduction in the total mortality rate in the United States has resulted in a modification of the age distribution of the population toward the mature years. Emphasis has shifted from a focus on curative medicine to disease prevention and to the quality of life. There is no better way for the productivity of the American people to be secured than thorough research into the ways in which food improves the quality of life of our citizenship and results in a productive longevity.

## BUDGET REQUEST FOR FISCAL YEAR 1987

The Children's Nutrition Research Center at Baylor College of Medicine, founded in November 1978, by the U. S. Department of Agriculture, currently has an annual budget of $4.2 million. The Center's $55 million permanent facility is under construction and could be available for occupancy in the summer of 1987. The appropriation request for Fiscal Year 1987 reflects the program development projected for the occupancy of this new building. An increased annual appropriation of $2 million for the Nutrition and Pregnancy Program, and $2 million for the Nutrition and Brain and Behavior Program are requested. With these two programs, the Center will have established four of the five programs authorized. The Center's move from rented facilities to the new building will require $1 million for facility operations.

The CNRC's research program is expected to be fully developed by 1990.

## THE 1987 APPROPRIATION REQUEST:

| | |
|---|---|
| Existing Budget | $4,200,000 |
| Establishing Pregnancy Program | $2,000,000 |
| Establishing Brain and Behavior Program | $2,000,000 |
| New Facility Operation | $1,000,000 |
| TOTAL REQUEST | $9,200,000 |

## APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS

**STATEMENTS OF:**

**JOHN BARRINGER, PRESIDENT, AGRICENTER INTERNATIONAL**

**PEGGY WHEELER, PUBLIC AFFAIRS DIRECTOR, NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY**

Senator MATTINGLY. Is Senator Gore here?

[No response.]

Are Ms. Peggy Wheeler and Mr. John Barringer here?

Let me just say at the outset, I know that Senator Gore would like to be here to introduce you if he were not tied up somewhere else.

This is that time of the year where one subcommittee meeting is overlapping with the other. Hopefully he will be able to come here shortly. If you would like to go ahead now, it would be good if you submitted your statements for the record. Then you can briefly outline the statements, if you want to, for the committee.

Mr. BARRINGER. Thank you, sir.

Mr. Chairman, members of the committee, we thank you for the chance to testify before this committee and to appreciate your concerns to study ways for increasing the effectiveness of agriculture in this country.

My name is John Barringer. I am president of Agricenter International, which is located in Memphis, TN. I am here today to speak in support of Appropriate Technology Transfer for Rural Areas [ATTRA], to be managed by the National Center for Appropriate Technology.

ATTRA is a much needed, centralized, low-input farming and community resource management technology data base and technical assistance center which will operate through a 900 line, training, workshops, and publications. The startup costs of ATTRA would require $1.8 million to be funded through a USDA fiscal year 1987 grant to the National Center for Appropriate Technologies located at Agricenter International.

Agricenter International is located within the boundaries of Memphis, TN, on land owned by Shelby County. Its 1,000 acres of land and its exhibit buildings are available for lease by agricultural businesses, organizations, universities, or agencies for display of products, testing of products, educational seminars, and demonstrations. The facility has just been completed and it is already 60 percent leased.

The land has irrigation displays, hydroponics, and a forestry unit. There are plans for an aquaculture exhibit, biomass exhibits, orchards, a biogas plant, alternative crops, conservation systems, and much more. This will take time to complete, but we are very excited about the potential of Agricenter for showing people here and from other countries the vast creativity of our technology developments and the best that other countries have to offer as well.

Farmers and urban people need to understand the role of agriculture in our overall economy and in the world's economy. I think Agricenter will help to convey this concept effectively while it helps our businesses, particularly small businesses, market their products.

### GOALS OF AGRICENTER

I have been encouraging NCAT to locate ATTRA at Agricenter if funding is arranged, because it would be one of the major pieces to the program that I have been trying hard to put together. At Agricenter, I hope to offer farmers, businesses, and rural communities options—new and successful options—that provide our rural people and our urban people with the means to help our food and fiber production, processing, and marketing research reach a new level of sustainability through diversity and competition.

Having grown up in the cotton business, the cattle business, and farmed myself, I have seen this country become one of the great agricultural leaders of the world. To hold this position, I believe we need to take a stronger look at the flow and debt level and at cutting some of our dependence on inputs that require such a high cash-flow and debt level. We need to diversify a bit, open up some markets, broaden our crops and farm management techniques.

I hope to offer some of the small businesses that are developing new products, new machinery options, a chance to reach broader markets by displaying at Agricenter. In addition, by having a program like ATTRA, managed by NCAT, at Agricenter, we will be able to provide farmers and rural communities with low-cost options through the development of a data base and the offering of technical implementation assistance to farmers, extension, and rural communities.

Statistics show potential savings of billions of dollars by cutting down input costs, while diversification of our system will help to stabilize local economies, as it frees up some of the dollars spent on imported inputs either to the farms or to the communities. Extensions and communities need access to a centralized data base on such systems and to a trained staff able to interpret and transfer this information. ATTRA would provide this access while helping to complete the overall unit that is Agricenter by leasing space in our central building.

I urge you to help start ATTRA at Agricenter by funding it through a grant of $1.8 million in the USDA fiscal year 1987 budget to NCAT located at Agricenter.

I also invite you to come to see Agricenter the next time you are in Tennessee, particularly in Memphis. I think you will find it an exciting and interesting place.

Thank you.

### CONGRESSIONAL WITNESS

### STATEMENT OF HON. ALBERT GORE, U.S. SENATOR FROM TENNESSEE

Senator MATTINGLY. I want to thank you very much for your comments and I would like to say that we now welcome the Senator from Tennessee, Senator Gore, to make a statement.

I also would like to say that Senator Sasser, who I know is a longtime friend of yours, wishes he could be here, but he is tied up in another meeting. Needless to say, this place is full of meetings, some of which are worthwhile and some of which are not.

But I would now like to ask Senator Gore to proceed.

Senator GORE. That was an unusual burst of candor, Mr. Chairman.

Senator MATTINGLY. Yes.

Senator GORE. Thank you very much for your courtesy, Senator Mattingly. It is a pleasure to be here to accompany John Barringer before the committee and also Peggy Wheeler, of the National Center for Appropriate Technology, who will speak in a moment.

The National Center developed the ATTRA concept and believes it should be located at Agricenter, if the necessary funding is forthcoming. I want to speak in support of ATTRA and of all the work my colleague, Senator Sasser, and others have contributed to its development.

Mr. Chairman, as you well know from your own State of Georgia, which is so similar to Tennessee in many respects, a lot of our rural communities and farmers face a very precarious cash-flow situation. They are looking for any means to reduce costs and to increase markets for local products. At the same time, they have to continue to grapple with high soil erosion rates and water quality problems and other kinds of problems.

In Tennessee, as in parts of Georgia, that particular problem of soil erosion is very, very serious and the southern Mississippi Valley has a serious problem. Their annual soil losses are up to 40 tons per acre. So this is a problem that really needs to be addressed.

ATTRA would provide a centralized data base on the sustainable, reduced input and reduced operating cost technologies on crop and market diversification and overall resource management. Its technology specialists would handle inquiries through the 900 line, and they would work through the Extension network of county agents and State specialists to transfer information on particular technology systems and success stories.

Much is now known about effective ways for farmers to cut fertilizer, pesticide, water, and energy costs, to achieve sustainable systems and to become economically more stable through diversified crops and markets.

We are also finding new ways for rural communities to cut water, energy, and land development costs and work with local businesses and farmers to use resources at hand to the maximum sustainable long-term advantage.

The technologies have been developed through public and private efforts, nationally and internationally. A central data base can help put these new techniques to work, providing a single, peer-reviewed system, and training Extension agents and communities to apply the techniques. ATTRA could pass along the many successes achieved in the southern States on alternative crop production, marketing and conservation of resources. These should be made known to other farmers. It could bring us new models and help farmers from different regions share successes in cutting costs.

ATTRA would be beneficial in helping farmers find new markets, new crops, and in reducing soil erosion and water pollution. Agricenter's emerging identity as an international education, demonstration, and show center makes it ideal for ATTRA. It has a proven record and vast potential. Now Agricenter needs a technology data base to coordinate its complex components, seminars, shows, and technical demonstrations.

Agriculture, as everyone knows—particularly from our parts of the country—is the backbone of America's economy. At this critical time for our Nation's farmers, the Federal Government should promote efforts to improve agricultural productivity and protect precious natural resources on our farms. The ATTRA data base will be a cheap, effective way to give our farmers the kind of help they need.

So I hope the committee will see fit to fund ATTRA through a USDA grant to the National Center for Appropriate Technology as managers at Agricenter.

Mr. Chairman, again, I want to thank you for allowing me to speak on behalf of this important program. Mr. Barringer has spoken and Ms. Wheeler will speak, and I am sure that you will have questions for them, but I just wanted to add my strong support for it. I appreciate your courtesy.

### STATEMENT OF PEGGY WHEELER

Senator MATTINGLY. Thank you very much, Senator Gore. We appreciate your kind comments. We would like to ask, Ms. Wheeler, do you have some comments you would like to make?

Ms. WHEELER. My name is Peggy Wheeler. I work for the National Center for Appropriate Technology. I am their public affairs director. I will try to be brief, since you are hearing a lot about ATTRA today.

But I do want to clarify a couple of things. Why ATTRA? One of the things the National Center for Appropriate Technology does is that we are a technical transfer organization. We do operate another toll-free line that handles renewable energy and energy conservation. Through this line, a couple of years back, we started noticing we were getting far more calls from farmers and rural communities and State level governments, having to do with everything from water conservation problems, ground water pollution problems, sustainable agriculture, and a real interest in rural communities looking for alternatives to the economic situation.

At that time, we sat down with the Department of Agriculture and the agriculture committees to see if there was a gap in the information transfer of these types of alternative technologies. We detected two problems, and that was why ATTRA was developed as a concept.

The first problem had to do with the information that is relayed through the computer bases and the Extension services, primarily that developed by the State agriculture experiment stations and the Agricultural Research Service. The Department of the Interior, that has done so much water irrigation work, EPA with their ground water pollution work, DOE with their energy in agriculture work, and a lot of the private sector development, plus so many of the little, local community research and model successes which have happened all over the country, are not relayed into that system.

So that was the first concept—the need to centralize that information, all the way to the international level, so that farmers, communities, and Extension agents primarily could get that kind of information quickly and easily and have access to what all is being developed.

The second problem was, how do you transfer that most effectively? Working with a number of State Extension directors and other organizations, we did put together the other part of ATTRA, and that is having specialists who can interpret the data base, relay it to the Extension agents in a mode where they can turn around and deal with their farmer and community problems most effectively. We also have practitioners on that data base so that communities can find out what other communities have had the same problems, and what those successes have been. For example, TVA has done a lot of work in terms of communities, with alternative markets, with alternate crops, that would be put into the data base.

Valleys up in Vermont where a lot of work has been done on this—that would be put into the data base. Israel, which has done so much work in this area—that would be put into the data base. We would be reaching out to the various areas and problems and technological developments around the country, putting them in and then making them available in what we feel is the most effective, cheapest way possible, working through the Extension network wherever that is possible.

So, basically, that is ATTRA.

The only other point I would like to briefly mention is that we have done a great deal of work trying to prove the other side of the issue of the economics involved: Are there real savings in these kinds of technologies? Can farmers really save money? Can communities really save money? We have done a lot of work in that area. It is in the testimony. It runs into the billions of dollars. We have segmented it by fertilizer savings, pesticide savings, water savings, et cetera.

So we have been trying to make that information available for the committee, and we are now giving it to your staffs on a State-by-State basis so you will be able to have that in terms of what the impacts would be on a specific farm, where they would really save money, and we are trying to put all of that together for you.

Senator MATTINGLY. Thank you very much.

Senator Abdnor, do you have any questions?

### SOURCE OF FUNDING

Senator ABDNOR. I am curious, Mr. Barringer. Do you have any Federal dollars in your budget now?

Mr. BARRINGER. No, sir; we do not. We are completely funded by Shelby County, the State of Tennessee, and private money.

Senator ABDNOR. I see. How old is the institution? How long has it been in existence?

Mr. BARRINGER. We began to put the concept together about 10 years ago, and we opened the building April 1. People are moving into the building. It is a brand-new facility. We have had seminars, programs, exhibits. They are beginning to function.

Senator ABDNOR. Being an old farm boy, and old farmer myself in agriculture, I can appreciate an institution like this.

Thank you very much.

Mr. BARRINGER. It is the first of its kind in the United States.

Senator MATTINGLY. Let me just ask one question. The request for the $1.8 million or $1.9 million for the new program: Is it possible that the startup costs could be recovered, or partly recovered, out of the savings you say this program would produce?

Ms. WHEELER. That is a tough one.

Senator MATTINGLY. You can submit an answer for the record later, if you would like.

Ms. WHEELER. The way that something like this can become self-sufficient, we find more than pulling it out of the savings of when you work with the farmers, although that is one approach. The trouble is that most of these systems are used predominantly by those farmers with the least amount of cash at this time.

We find we are working with a lot of foundations, and the city governments and the State governments are where we find the most possibility. Once they begin to realize the types of savings that are possible, yes, they could become the funders in the future of this type of program.

Senator MATTINGLY. Thank you both very much for your testimony today.

[The prepared statement of Ms. Wheeler, along with supplementary materials, follows:]

## STATEMENT OF PEGGY WHEELER

Mr. Chairman, Members of the Committee, thank you for this opportunity to testify. My name is Peggy Wheeler. I am the Public Affairs Director of the National Center for Appropriate Technology, NCAT. I am here today on behalf of NCAT and John Barringer of Agricenter International to ask for your funding support for a new program we call ATTRA, Appropriate Technology Transfer for Rural Areas comprised of a centralized internationally-drawn data base and a 900 line connecting the public to an assistance center transferring rural appropriate technologies. ATTRA would need $1.8 million through USDA grant authority to start up in FY 1987, managed by NCAT at Agricenter International in Memphis, Tennessee. (I have included a budget summary as an appendix, for your information, as well as lists of state fertilizer expenditures and an ATTRA Summary.)

NCAT is a non-profit corporation created by Congress in 1976 to transfer appropriate technologies to the American public. An "appropriate technology" is that technology which is best suited to the specific cultural, economic, social and ecological conditions at the site of its application. The design or adaptation of such technologies conserves and maintains natural resources, is low-cost, uses site-available natural and human resources, is manageable by users, and harmonizes with the environment. Our principal methods in technology transfer are technical monitoring and evaluation, technical assistance, and information dissemination including publications and training. We manage federal, state and private sector contracts in this regard.

NCAT developed the ATTRA concept with help from many agricultural and rural development specialists around the country in response to gaps we detected as a result of our work in the technology transfer area. These gaps relate to the transfer of technical information and assistance on low input farming, crop, marketing and processing diversification, community resource management the conservation reserve and easement program. The gaps are in two areas: the first being a need to have a centralized, peer reviewed data base system on these low input farming and community resource management technologies collected from all sources of research and development, federal agencies, public and private sector; the second gap being the need to have sytematic technical implementation assistance transfer through training of extension and communities, publications, and a 900 line connecting extension, rural networks, communities, and businesses with NCAT specialists trained at transferring the technologies on the data base.

Therefore, ATTRA, if funded, would accomplish two main goals. First, it would develop a broad, peer reviewed database, drawn from all relevant federal and state agencies and public and private sector organizations, of low input farming technologies, practical information on current use of such technologies, community resource management systems to reduce operating costs, local crop production, marketing, and processing diversification methods, and practitioners of these technologies.

The second goal would be the transfer of these technologies to extension agents, farmers, rural networks, and rural communities and businesses through the use of a 900 telephone line staffed by technical specialists. The specialists would provide technical implementation assistance and referrals to local projects that practice such management techniques. Additionally, ATTRA would provide workshops and publications to train extension agents and communities in the uses of particular low-input, low-operating cost methods.

By funding ATTRA, Congress would be helping to expedite the transfer of low-input farming technologies and community resource management systems to extension services, farmers, and rural communities and businesses. Such emphasis on these technologies is needed because their use can have substantial impact on reducing cash flow requirements and operating costs of farms and rural communities. The use of these technologies also can alleviate the serious environmental problems and lessen the depletion of resources caused by the overuse and mismanagement of water supplies, chemicals, soil and energy supplies on our farms and in our communities.

You all know this country is losing farms rapidly, while rural banks and rural communities go bankrupt. You have been thoroughly appraised of the soil erosion, groundwater pollution, and water depletion problems we face.

But the savings potential related to the successful transfer of the technologies I speak of today, low-input farming, conservation and sustainable agriculture, community resource management, crop diversification, and alternative marketing and processing systems aimed at achieving greater local and state economic stability while improving local resource utilization, is only beginning to be acknowledged.

Let me give you a few facts:

On Farm Savings:

** Up to $2 billion of the $9 billion spent on fertilizer and lime each year could be saved simply through applying the fertilizer more efficiently.(RAA)

** Another $2 billion of fertilizers lost through erosion and leaching could be saved through erosion control technologies.(USDA,NCAT)

** Use of Integrated Pest Managment would save about $2 billion of the $4.94 billion spent on pesticides.(USDA)

** Water use can be reduced on farms 36-56%, thus reducing water and pumping costs. (Nebraska, Arizona, NCAT)

** $3.31 billion of energy costs could be saved through different farm management techniques. (GAO)

Community Savings

** A minimum of $180 million could be saved in rural communities of 50,000 or less through use of basic water conservation technologies.(NCAT,EPI)

** The off-farm costs of soil erosion, $2.2 billion, mainly paid for by rural communities to clean up ditches, highways, water purification and sediment filtration could be reduced 25-90%.(Cons.Fdn'n)

** Energy cost reduction of 10-20% could be easily experienced by rural communities through street light changes, water conservation, sewage teatment plant renovations, and other energy conservation techniques. This would range in savings of thousands to millions of dollars for individual communities.(NCAT)

Let me go into further detail about how information provided by ATTRA could help reduce fertilizer costs by up to 40%, as an example. There are two ways to cut fertilizer requirements in farming: through reduction of erosion and by more efficient application. Crop uptake of fertilizer applied in conventional farming techniques is generally around 50%; this means that 50% of the primary nutrients (nitrogen, phosphate, and potash) in the fertilizer does not reach the crops. Almost all of this is lost through erosion and runoff. Better tillage techniques, such as conservation tillage, reduce erosion by at least 50% (in some instances by up to 95%). Thus, simply by using different tillage techniques, one half of the nutrients in fertilizer applications that are lost (or 25% of the total application) could be saved.

In addition, the Regenerative Agriculture Association has estimated that farmers could save another $2 billion a year by more careful application of fertilizer. Many farmers use far more fertilizer than is necessary (an average of $42 an acre more), due largely to the inadequate calculations of existing nutrient content in the soil and failure to include primary nutrients returned to the soil by legumes in nutrient calculations. Application of fertilizer before rains and at inappropriate points in the growing season also add to fertilizer costs without increasing yield. These costs could be eliminated with better dissemination of existing knowledge.

Furthermore, many models exist and new ones emerge daily of rural community successes at achieving better economic stability through approaching local resource and employment problems in a manner that uses local natural and human resources to fill as many local or state needs as possible prior to export. This approach curtails unnecessary export of dollars spent on imported energy, food and farm imports while reducing environmental cleanup costs to communities and farmers.

For example: Working with American Farmland Trust, a group of dairy farmers in a valley in Vermont decided that they needed to make entirely new cheeses to meet the higher price market for European style cheeses and yogurts; they are now processing and marketing such cheeses and getting a higher return for their product. The community of Berea, Kentucky is learning to process its raw lumber to the kiln dried and furniture stages to retain more dollars in the community; a town in North Carolina, working with the TVA, has started a tomato coop, successfully marketing a new tomato strain while lessening its dependence on tobacco. The State of Texas Department of Agriculture conducted a blueberry market analysis, and based on its findings is now working with farms communities toward successful production and marketing. Farmers in Indiana are investigating marketing hay in Florida through a cooperative arrangement. The State of Nebraska is taking a serious look at its state resources to see what alternative uses might be made of them to keep more dollars in state while preserving its land and water. Three commmunities in California, Illinois, and Arizona cut their water use and saved millions of dollars in energy and water costs. Missouri studied potential savings if energy use were reduced in communities and found easily obtainable savings of 10% across the state.

There is a great deal of transfer occurring in these technologies in many isolated instances around the country. Conferences on groundwater pollution, sustainable agriculture, water depletion, are conducted constantly. Individual states are taking serious looks at resource planning.

The Institute for Alternative Agriculture is now producing a scientific, refereed journal on alternative agriculture to meet the need scientists had for a forum to publish their work on alternative agriculture technologies and approaches.

ATTRA would be the next link in the evolving process of technology transfer by 1) centralizing the excellent, but scattered, information bases on these technologies in a way that is accessible to extension agents and state specialists, thereby eliminating the need for each individual to constantly track down information from EPA, DOI, DOE, and private colleges and universities in addition to following the well-maintained network of USDA and SAES, and by, 2) providing this information through technical implementation assistance, data interpretation, and practitioner referral to extension, farmers, rural communities, businesses and residents.

We recommend that ATTRA be located at Agricenter International in Memphis, Tennessee and managed by NCAT, for several reasons. Agricenter is a brand new international agriculture education and technology demonstration trade center. ATTRA's location at this new, vital location will provide the people, organizations, agencies, and businesses who come to Agricenter with ready access to a data base of low input and lower operating cost technolgies. Specialists trained to assist the pubilc in the use of these technologies will be available. Agricenter offers NCAT a place to set up ATTRA in a flexible, rapid manner requiring no building construction and having the benefit of Agricenter's growing recognition and vitality. The facilities are ideal for the extension and community training components of ATTRA.

ATTRA and Agricenter International should unite to offer the American public a fresh, exciting place to learn of the new technologies and methods that can keep our farms and rural communities strong, flourishing and competitive.

The $1.8 million start up cost for ATTRA through a grant to NCAT which will manage it at Agricenter International, will help to transfer these cost-cutting, diversified options to our farmers and rural communities which are right now on the edge of disaster. The very large scale farmers may not blink at $20,000- $100,000 saved by cutting fertilizer, pesticide, water and energy costs, but the medium and moderate sized farmers at the brink will know that such savings could mean holding onto their farms. Making such information easily available to farmers and communities, while training and working with the extension and community network throughout the country so their knowledge of such technologies is honed for effective transfer, will expedite the transfer of these needed options.

Why use NCAT? Because NCAT is truly a unique national center for appropriate technology in this country. For ten years, NCAT has transferred information through publications, training workshops, toll-free service, technical monitoring and research analysis. Clients include federal, state, and local agencies, the public, businesses, farmers and rural communities. NCAT is deeply committed to transferring appropriate technologies. We want people and communities to learn more about and to practice technologies that will keep the production of food, energy, housing, and the other basics of life a bit closer to home so their source is stable and sustainable for the forseeable future. To do so requires that our natural resources be conserved and maintained, and our industries, crops, marketing and processing systems be diversified in order to be sensitive to local job and resource requirements. We have been successful at such transfer, but more resources are needed to grapple with the complex and challenging needs of our rural communities and our small to medium sized farmers today. ATTRA is needed now.

Thank you for your attention to this. I hope you will consider what I have said and include ATTRA in the USDA FY 1987 budget. NCAT believes that it is a program which needs to be started.

Aside from support for ATTRA, I wish to mention two other areas NCAT strongly supports: the continuation in full strength of the Extension Service and the Cooperative Extension system, and the funding of the Agricultural Productivity Act research and demonstration farms as passed by the Farm Bill of 1985 at a level of $2 million dollars.

We support the need for a strong Extension system. If low input farming, crop diversification, community resource management and alternative marketing and processing are to be transferred from ATTRA to farmers and communities, Extension is most definitely needed in full force. These technologies are not just "off the shelf" types which can be purchased, carted out to the field and used. When talking of reducing chemicals, energy, and water, substitutions need to occur. These substitutions can be local forms of energy or nutrients or simply more intense management and use of labor in new, sometimes more complex arrangements. This type of technology change requires hands on training and constant attention. If ATTRA is funded we need extension in place in order for ATTRA to work effectively. Therefore, we recommend its continuation at current levels.

As for the Agriculture Productivity Act, the research which will be supported by its funding is the next step in the necessary technology development for low input farming, resource management, and conservation approaches. While much has been learned over the last thirty years in these areas, a great deal more needs to be researched to further our understanding of nutrient cycles, water conservation techniques, impacts of crop diversification, and impacts of varied farming techniques on groundwater. This is one more part of the continuing linkage of the research and transfer of technologies in these vitally important areas to our agricultural system's sustainability and growth.

## LETTER FROM ROBERT J. MULLINS, ET AL.

Chairman Thad Cochran
140 Dirksen Senate Office Building
Washington, D.C.

18 April, 1986

Dear Mr Chairman:

We urge the funding of ATTRA, Appropriate Technology Transfer for Rural Areas, in the USDA FY 1987 budget under grant authority at a cost of $1.8 million.

Appropriate technologies, including low-input farming, crop diversification, community resource management, and alternative community marketing and processing systems, can free up cash flow for farmers and communities by reducing their operating costs, thereby having a stabilizing impact on a currently deteriorating rural economy.

These appropriate technologies, if implemented, also would minimize the costly environmental and public health problems associated with hazardous or costly cleanup of water quality due to high levels of nitrates, sediment, and pesticides; groundwater depletion due to heavy irrigation; soil erosion; and community water use.

ATTRA's 900 phone line and centralized, peer-reviewed data base would be an efficient way to provide farmers with much needed access to help on specific implementation assistance. Other parts of ATTRA, including its practitioners advisory group and training of extension will help to expedite the use of these systems and their transfer by Extension.

The establishment of ATTRA is a needed step to help move rural America toward a sustainable future. We strongly urge you to appropriate $1.8 million for ATTRA under the USDA grants budget authority for FY 1987 to be managed by NCAT at Agricenter International.

Sincerely,

Robert J. Mullins
Robert Mullins
National Farmers' Union

David Senter
David Senter
American Agricultural Movement

Maureen B Hinkle
Maureen Hinkle
National Audubon Society

Warren Sahs
Warren Sahs
Inst. for Alternative Agriculture

Steven Bunker
Steven Bunker
Chesapeake Bay Foundation

Roger Claasen
Roger Claasen
Interfaith Action

Bill Holmberg
Bill Holmberg
Solar Lobby

Charles Frazier
Charles Frazier
National Farmers' Organization

Robert J Gray
Robert Gray
American Farmland Trust

Robert Rapoza
Rural Housing Coalition

Louis Bruce
Louis Bruce
Native American Consultants

Scott Sklar
Scott Sklar
Solar Energy Industries Assoc

Justin Ward
Justin Ward
Natural Resource Defence Council

David Raphael
David Raphael
Rural America

Ed Block
Edward Block
NCAADA

Judy Gillan
Judy Gillan
New England Small Farm Inst.

Lawrence F. Parachini Jr.
Lawrence Parachini
Rural Coalition

Bill Ayers
Bill Ayers
World Hunger Year

David Culp
David Culp
Environmental Action

Paul Markowitz
Paul Markowitz
Public Citizen

Jim Skillen
James Skillen
Association for Economic Justice

Daniel Langor
Daniel Langor
Western Massachusetts Food Bank

Mohammed Elashry
Mohammed Elashry
Water Resources Specialist

# ATTRA BUDGET

## ATTRA BUDGET—ALL TASKS — First Year

| DIRECT LABOR: | | Fully Burdened Cost |
|---|---|---|
| | TASK #1 | $833,424 |
| | TASK #2 | $76,560 |
| | TASK #3 | $498,096 |
| | TASK #4 | $141,600 |
| | | $1,549,680 |
| OTHER DIRECT COSTS: | | |
| | TASK #1 | $115,000 |
| | TASK #2 | $0 |
| | TASK #3 | $135,000 |
| | TASK #4 | $20,000 |
| | | $270,000 |
| | TOTAL ATTRA COST | $1,819,680 |

TASK 1- Development of ATTRA Data Base
(work for 12 months)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes:<br>Program Director<br>Computer Specialists<br>Agriculture Specialists<br>(12 types) | | | |
| TOTALS | 28868 | 28.87 | $833,424 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | | COST |
|---|---|---|
| Includes: | Micro Computer Network (8 stations)<br>TVA Statistical Access<br>Other Data Base Access | |
| | TOTAL ODCs | $115,000 |
| | TOTAL TASK #1 COST | $948,424 |

TASK 2- Development of Practitioners Advisory Group
(work for 12 months — Identify 1500 practitioners)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes:<br>Program Director<br>Agriculture Specialists<br>(12 types) | | | |
| TOTALS | 3328 | $23.00 | $76,560 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | COST |
|---|---|
| ****** NONE ****** | $0 |
| TOTAL ODCs | $0 |
| TOTAL TASK #2 COST | $76,560 |

TASK 3 - Operation of Technology Transfer Program
(900 # calls begin in 7th month)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes:<br>Program Director<br>Agriculture Specialists<br>(12 types)<br>Administrative Support | | | |
| TOTALS | 16682 | 29.86 | $498,096 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | COST |
|---|---|
| Includes: Subcontractors;<br>TVA Agriculture Specialist<br>Graduate Interns | |
| TOTAL ODCs | $135,000 |
| TOTAL TASK #3 COST | $633,096 |

TASK 4- Publications and Training Workshops
(2 publications, 4 workshops)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes: | | | |
| Training Staff | | | |
| Publications and Editorial Staff | | | |
| TOTALS | 5200 | 27.23 | $141,600 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | | COST |
|---|---|---|
| Includes: | Materials And Supplies<br>Equipment | |
| | TOTAL ODCs | $20,000 |
| | TOTAL TASK #4 COST | $161,600 |

ATTRA BUDGET—ALL TASKS — Second Year

| | | Fully Burdened Cost |
|---|---|---|
| DIRECT LABOR: | | |
| | TASK #1 | $786,180 |
| | TASK #2 | $76,560 |
| | TASK #3 | $1,424,720 |
| | TASK #4 | $336,000 |
| | | $2,623,460 |
| OTHER DIRECT COSTS: | | |
| | TASK #1 | $115,000 |
| | TASK #2 | $0 |
| | TASK #3 | $135,000 |
| | TASK #4 | $50,000 |
| | | $300,000 |
| | TOTAL ATTRA COST | $2,923,460 |

TASK 1- Development of ATTRA Data Base
(work for 12 months)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes:<br>Program Director<br>Computer Specialists<br>Agriculture Specialists<br>(12 types) | | | |
| TOTALS | 27071 | 29.04 | $786,180 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | | COST |
|---|---|---|
| Includes: | Micro Computer Network (8 stations)<br>TVA Statistical Access<br>Other Data Base Access | |
| | TOTAL ODCs | $115,000 |
| | TOTAL TASK #1 COST | $901,180 |

TASK 2- Development of Practitioners Advisory Group
(work for 12 months — Update & Identify new practitioners)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes:<br>Program Director<br>Agriculture Specialists<br>(12 types) | | | |
| TOTALS | 3328 | 23.00 | $76,560 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | COST |
|---|---|
| ****** NONE ****** | $0 |
| TOTAL ODCs | $0 |
| TOTAL TASK #2 COST | $76,560 |

TASK 3 - Operation of Technology Transfer Program
(900 # calls operate all 12 months)
(initiate Field Staff operation)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes: | | | |
| CENTER Staff; | | | |
| Program Director | | | |
| Agriculture Specialists (12 types) | | | |
| Administrative Support | | | |
| SUBTOTALS | 27246 | 30.01 | $817,520 |
| FIELD STAFF: | | | |
| Agriculture Specialists (10 types) | | | |
| SUBTOTALS | 20800 | 29.19 | $607,200 |
| | | TOTAL LABOR: | $1,424,720 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | COST |
|---|---|
| Subcontractors: | |
| TVA Agriculture Specialist | |
| Graduate Interns | |
| TOTAL ODCs | $135,000 |
| TOTAL TASK #3 COST | $1,559,720 |

TASK 4- Publications and Training Workshops
(2 publications, 4 workshops)

Direct Labor:

| Labor Category | Hours | Average Burdened Rate | Cost |
|---|---|---|---|
| Includes: | | | |
| Training Staff | | | |
| Publications and Editorial Staff | | | |
| TOTALS | 12480 | 26.92 | $336,000 |

Other Direct Costs:

| Description of Other Direct Cost Item(s) | | COST |
|---|---|---|
| Includes: | Materials And Supplies | $25,000 |
| | Equipment | $25,000 |
| | TOTAL ODCs | $50,000 |
| | TOTAL TASK #4 COST | $386,000 |

# APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS [ATTRA]

A program to help rural communities and farmers,
especially those operating small-to-moderate sized farms.

by Peggy Wheeler Kains

## Why ATTRA?

In 1984, rural areas lost 400,000 members from their farm populations. As rural communities face declining tax bases yet stable or increasing operating costs, and as more individual farms face foreclosure, more rural banks close their doors, and cash and credit become increasingly scarce.

Current farming and rural community management practices are costly and questions about their sustainability grow as serious impacts on soil, water supply and quality, and local jobs become known. (From 1930 to 1980 agricultural chemical use increased 1900%, mechanical power 200%, while labor declined 80% (GAO)).

The National Center for Appropriate Technology (NCAT) and a consortium of supporters believe that a new program called ATTRA -- Appropriate Technology Transfer for Rural Areas -- would address the immediate need for reducing high-cost farm input requirements and rural community operating costs while better utilizing all available farm and community resources.

ATTRA would assist farmers, extension agents and communities in designing and implementing appropriate technologies such as low-input farming, community resource management, diversification of crops, rotational management and conservation tillage, alternative marketing and processing methods. In addition, through information transfer and technical assistance, ATTRA could help foster the best use of the conservation reserve, enhance efforts that promote appropriate substitutions of labor and resources, and encourage alternatives that result in water and energy efficiency.

Currently, the Extension Service is the broadest rural network for information and technology transfer. However, the data bases which they access draw upon USDA and State Agricultural Experiment Station information almost exclusively. The data does not include information developed by the Department of Interior, the Environmental Protection Agency, the Department of Energy, other state, non-profit, private, and local initiatives. At present, there is no central technical information system which compiles and offers implementation and business management assistance on low-input farming, community resource management, and sustainable agricultural methods. ATTRA will fill that void.

## What Is ATTRA?:

One main purpose of ATTRA is the development of a broad database on low-input farming technologies and practical information on the current use of such technologies. The data base would include information on rural community resource management methods to reduce operating costs and increase local diversification of farming products for economic and natural resource sustainability.

A second goal of ATTRA would be to transfer these technologies to extension agents, farmers, and rural communities and businesses through the use of a 900 telephone line staffed by technical specialists. The specialists would provide technical implementation assistance, and referrals to local projects that practice such management techniques. Additionally, ATTRA would provide workshops and publications to train communities and extension agents in the uses of particular low-input, low-operating cost methods.

ATTRA would be based at Agricenter International in Memphis, Tennessee. Agricenter is a new, major agricultural technology demonstration, educational, and show center.

The Value of Information and Technical Assistance in Potential Savings

If established as a federal program, ATTRA could offer immediate, critically-needed technical information and assistance to both farmers and rural communities in their efforts to solve problems and reduce operating costs. Cited below are just a few examples of the many opportunities for potential savings.

On Farm Savings:

Erosion of nutrients: Annual agricultural expenditures on fertilizer and lime equal $9.024 billion (Ag.Statistics.1983). Each year approximately $2.8 billion worth of nitrogen and phosphate nutrients are eroded away. (Cons. Fd'n and Environmental Quality reports).

Of the 131 million acres of seriously eroding land, almost half (approximately 53-60 million acres) erode at levels above 15 tons/acre and must be placed in a conservation reserve to curtail the problem. The ATTRA Center would conduct analyses of erosion curtailments on land placed under the reserve to assist farmers needing to make judgements about the conservation reserve program. The remaining 70-75 million acres erode at levels of 5-15 tons/acre; on this land, the problem can be curtailed by 20-95% through the application of soil conservation technologies, such as conservation tillage, rotational management, watershed management and crop siting (AFT and Cons.Fd'n).

Fertilizer application efficiency: As for the huge expenditures on fertilizers, practices related to more efficient applications could cut costs from $500 million to $2 billion per year (RAA survey.)

Integrated Pest Management: A Cooperative Extension study and EPA studies on integrated pest management (IPM) state that national annual pesticide costs of $4.5 billion could be reduced by 40% through IPM application. Thus, a savings of nearly $2 billion annually could be achieved. Reductions in health hazards and water pollution would also occur.

Water Supply: Agriculture accounts for 83% of all water withdrawals. Half of the irrigated farmland is drawing ground water from aquifers which are declining at a rate of .5 - 6 feet per year (Conservation Foundation). Irrigation costs are ranging up to $61/acre-foot in some areas. Studies have shown that technical changes -- such as land levelling, furrow manipulation, tillage changes, alternative crops and rotational management -- could reduce these water costs by 36-56%. (EPI, Nebraska, and Arizona studies.)

Energy : Agriculture uses more petroleum than any other single industry. In 1980 it accounted for 353 million barrels of oil per year (GAO/Comptroller General). A 1982 GAO report demonstrated that 74 million barrels of oil equivalent, could be saved through soil erosion management, protection of prime farmland, water management, conservation tillage, crop drying, improved fertilizer use, and other alternative management methods. Taking into account the energy conservation improvements of 19% which farmers have achieved since 1980, an additional annual savings potential of $3.31 billion could be reached.

Rural Communities Savings: Decreasing farm population and the folding of farm-related businesses due to farm loss has cut the tax base of communities while their operating costs remain high. Costs in energy, water use and cleanup, and natural resource handling have increased, some in direct relation to farm methods causing soil erosion, water run-off and surface-water and groundwater pollution. Reducing these expenditures by cutting use and through more efficient handling, changes in future land development patterns to ease density pressures impacting septic and sewage system faults, and interaction with farmers towards community approaches can cut rural community operating costs. For example:

Water Supply: Communities use 6% of our total water supply. An EPI study indicates that a community of 10,000 on a municipal water system could save $36,500 through the simplest water-saving methods. There are about 50 million people on municipal water systems in rural communities of 50,000 or less. If these communities implemented simple water-saving methods at least $180 million could be saved. (These are low estimates: two municipalities that implemented community water-saving programs were able to achieve savings of $3 million and $6 million each, at costs only of $260,000 and $120,000, respectively.)

Erosion Cleanup: Off-farm costs of soil erosion from cropland are $2.2 billion, including general water purification, sediment filtration from water, and county highway/ditch cleanup of sediment. Rural communities and towns are currently absorbing much of this bill (Cons.Fd'n).

Energy: Rural communities can achieve energy costs savings of 10-20%, conservatively, through water conservation, building weatherization, street light changes, sewage treatment plant renovations, municipal operations consolidation, and other energy conservation techniques.

## Users of ATTRA

ATTRA users would include:

* farmers, rural residents, and rural communities needing tailored technical and management assistance on lowering input and operating costs, crop diversification, community and natural resource management; with a primary use by small-to-medium sized farmers. (A USDA report,among others, demonstrated that alternative technologies are mainly used by moderate-sized farmers.);

* extension agents needing additional technical information and implementation assistance to better help local farmers with specific technical needs on lowering input costs, crop diversification, resource management;

* internationally-drawn farmers and governments needing access to the data base;

* businesses needing financial and business planning assistance to commercialize alternative agricultural products, marketing and processing systems;

* rural bankers and loan specialists needing technical expertise on farm technologies.

## Funding for ATTRA?

NCAT is seeking funding for ATTRA through the Agriculture Appropriations Subcommittee. First year costs to establish and operate ATTRA will be $1.8 million — a very small fraction of the billions of dollars that could be saved as a result of providing timely information and assistance in using input-cutting, cost-cutting technologies. ATTRA is a major step toward relieving the current agricultural crisis. This step is needed now.

We need your support, this year, for ATTRA's funding. Be a part of the solution to a national crisis ... ATTRA is ready to be implemented. Help make it a reality.

## FERTILIZER CONSUMPTION BY STATE, 1984

In dollars (Tonnage in Parentheses)

| | TOTAL | COMMERCIAL | DIRECT APPLICATION | | |
|---|---|---|---|---|---|
| STATE | USAGE | MIXTURES | N | P2O5 | K2O |
| ALABAMA | $173,616,490 | $97,054,280 | $59,423,228 | $5,084,200 | $5,133,371 |
| | (913,771) | (510,812) | (316,081) | (23,110) | (37,089) |
| ALASKA | 2,443,400 | 1,824,950 | 646,720 | 85,800 | 18,070 |
| | (13,565) | (9,605) | (3,440) | (390) | (130) |
| ARIZONA | 69,437,780 | 15,501,150 | 35,371,260 | 6,242,060 | 115,787 |
| | (328,967) | (81,585) | (188,145) | (28,373) | (833) |
| ARKANSAS | 167,711,480 | 73,382,750 | 83,860,408 | 2,056,100 | 4,505,268 |
| | (882,692) | (386,225) | (446,066) | (9,355) | (32,412) |
| CALIFORNIA | 744,196,370 | 143,896,680 | 310,280,088 | 41,434,580 | 12,797,452 |
| | (3,916,823) | (757,352) | (1,650,426) | (188,339) | (92,068) |
| COLORADO | 105,564,000 | 18,200,480 | 68,757,804 | 5,967,500 | 3,556,732 |
| | (555,600) | (95,792) | (365,733) | (27,125) | (25,588) |
| CONNECTICUT | 10,387,680 | 7,664,220 | 1,063,516 | 242,000 | 169,163 |
| | (54,672) | (40,338) | (5,657) | (1,100) | (1,217) |
| DELAWARE | 27,472,290 | 12,307,250 | 11,605,616 | 379,060 | 2,145,187 |
| | (144,591) | (64,775) | (61,732) | (1,723) | (15,433) |
| D.C. | 1,534,250 | 1,368,000 | 46,060 | 3,300 | 4,865 |
| | (8,075) | (7,200) | (245) | (15) | (35) |
| FLORIDA | 373,669,200 | 307,975,370 | 31,889,312 | 3,409,120 | 12,011,268 |
| | (1,966,680) | (1,620,923) | (169,624) | (15,496) | (86,412) |
| GEORGIA | 363,770,770 | 201,243,690 | 109,024,208 | 4,159,760 | 8,192,243 |
| | (1,914,583) | (1,058,651) | (579,916) | (18,908) | (58,937) |
| HAWAII | 24,386,120 | 15,873,360 | 2,842,748 | 2,203,080 | 2,637,247 |
| | (128,348) | (83,544) | (15,121) | (10,014) | (18,973) |
| IDAHO | 118,340,740 | 23,542,140 | 76,945,768 | 12,296,240 | 2,622,513 |
| | (622,486) | (123,906) | (409,286) | (55,892) | (18,867) |
| ILLINOIS | 831,714,170 | 255,646,710 | 351,732,500 | 47,344,660 | 152,758,915 |
| | (4,127,448) | (1,345,509) | (1,870,918) | (215,203) | (1,098,985) |
| INDIANA | 498,806,620 | 234,562,790 | 173,966,740 | 11,747,780 | 54,883,177 |
| | (2,625,298) | (1,234,541) | (925,355) | (53,399) | (394,843) |
| IOWA | 726,113,120 | 217,050,300 | 360,891,276 | 13,606,120 | 115,612,416 |
| | (3,821,648) | (1,142,370) | (1,919,632) | (61,846) | (831,744) |
| KANSAS | 288,042,280 | 84,562,730 | 186,102,704 | 3,336,080 | 8,174,312 |
| | (1,516,012) | (445,067) | (989,908) | (15,164) | (58,808) |
| KENTUCKY | 191,574,720 | 85,227,540 | 63,036,024 | 8,652,820 | 24,444,123 |
| | (1,008,288) | (448,566) | (335,298) | (39,331) | (175,857) |
| LOUISIANA | 137,468,230 | 73,195,030 | 53,325,824 | 1,769,900 | 5,370,126 |
| | (723,517) | (385,237) | (283,648) | (8,045) | (38,634) |
| MAINE | 17,470,690 | 15,465,240 | 1,180,392 | 238,260 | 313,167 |
| | (91,951) | (81,396) | (6,284) | (1,083) | (2,253) |
| MARYLAND | 69,876,490 | 39,558,380 | 21,059,384 | 2,358,620 | 3,860,308 |
| | (367,771) | (208,202) | (112,018) | (10,721) | (27,772) |
| MASS. | 10,695,670 | 7,922,050 | 647,848 | 139,700 | 327,345 |
| | (56,293) | (41,695) | (3,446) | (635) | (2,355) |
| MICHIGAN | 287,538,590 | 131,329,900 | 84,199,936 | 4,364,360 | 43,682,557 |
| | (1,513,361) | (691,210) | (447,872) | (19,838) | (314,263) |
| MINNESOTA | 383,329,180 | 131,499,950 | 137,531,024 | 11,977,020 | 71,717,745 |
| | (2,017,522) | (692,105) | (731,548) | (54,441) | (515,955) |
| MISSISSIPPI | 165,549,410 | 77,996,420 | 71,959,632 | 5,423,000 | 7,173,929 |
| | (871,839) | (410,518) | (382,764) | (24,650) | (51,611) |

|  | TOTAL | COMMERCIAL | DIRECT APPLICATION |  |  |
|---|---|---|---|---|---|
| STATE | USAGE | MIXTURES | N | P205 | K20 |
| MISSOURI | $298,617,110<br>(1,571,669) | 205,345,350<br>(1,080,765) | 75,216,168<br>(400,086) | 3,098,040<br>(14,082) | 7,735,072<br>(55,648) |
| MONTANA | 86,139,480<br>(463,892) | 39,484,720<br>(179,476) | 43,177,960<br>(229,670) | 6,299,260<br>(28,633) | 2,850,334<br>(20,506) |
| NEBRASKA | 351,396,450<br>(1,849,455) | 84,566,720<br>(445,088) | 241,429,412<br>(1,284,199) | 4,306,280<br>(19,574) | 11,154,611<br>(80,249) |
| NEVADA | 5,667,890<br>(29,831) | 1,048,990<br>(5,521) | 2,156,360<br>(11,470) | 822,580<br>(3,739) | 18,209<br>(131) |
| NEW HAMPSHIRE | 4,158,340<br>(21,886) | 2,925,050<br>(15,395) | 419,992<br>(2,234) | 109,780<br>(499) | 298,294<br>(2,146) |
| NEW JERSEY | 39,333,800<br>(207,220) | 32,469,670<br>(170,893) | 3,406,748<br>(18,121) | 220,220<br>(1,001) | 313,584<br>(2,256) |
| NEW MEXICO | 24,923,060<br>(131,174) | 6,317,500<br>(33,250) | 14,280,104<br>(75,958) | 1,425,160<br>(6,478) | 1,424,472<br>(10,248) |
| NEW YORK | 124,389,580<br>(655,560) | 79,111,250<br>(416,375) | 20,849,764<br>(110,903) | 8,572,300<br>(38,965) | 9,724,857<br>(69,963) |
| N CAROLINA | 351,762,580<br>(1,851,382) | 212,301,250<br>(1,117,375) | 101,323,540<br>(538,955) | 2,486,000<br>(11,300) | 9,512,187<br>(68,433) |
| N DAKOTA | 104,758,590<br>(551,361) | 48,283,370<br>(254,123) | 50,005,180<br>(265,985) | 2,219,580<br>(10,089) | 2,763,320<br>(19,880) |
| OHIO | 372,989,950<br>(1,963,105) | 145,672,620<br>(766,698) | 129,612,276<br>(689,427) | 17,341,940<br>(78,827) | 58,361,235<br>(419,865) |
| OKLAHOMA | 151,403,400<br>(796,861) | 52,512,200<br>(276,380) | 90,660,932<br>(482,239) | 2,222,220<br>(10,101) | 5,057,098<br>(36,382) |
| OREGON | 97,978,440<br>(515,676) | 17,838,150<br>(93,885) | 58,927,284<br>(313,443) | 13,909,500<br>(63,225) | 4,581,162<br>(32,958) |
| PENNSYLVANIA | 96,007,380<br>(505,302) | 71,404,470<br>(375,813) | 19,561,212<br>(104,049) | 1,189,540<br>(5,407) | 2,646,143<br>(19,037) |
| RHODE ISLAND | 4,495,970<br>(23,663) | 3,970,620<br>(20,898) | 116,560<br>(620) | 106,480<br>(484) | 36,001<br>(259) |
| S CAROLINA | 133,417,050<br>(702,195) | 82,212,620<br>(432,698) | 42,046,764<br>(223,653) | 1,280,400<br>(5,820) | 3,524,762<br>(25,358) |
| S DAKOTA | 78,882,680<br>(415,172) | 29,123,010<br>(153,279) | 42,462,244<br>(225,863) | 3,384,920<br>(15,386) | 2,772,077<br>(19,943) |
| TENNESSEE | 137,000,450<br>(721,055) | 61,147,510<br>(321,829) | 42,169,340<br>(224,305) | 6,383,520<br>(29,016) | 20,109,408<br>(144,672) |
| TEXAS | 583,764,930<br>(3,072,447) | 330,784,110<br>(1,740,969) | 228,322,804<br>(1,214,483) | 11,832,040<br>(53,782) | 4,520,141<br>(32,519) |
| UTAH | 20,196,810<br>(106,299) | 4,138,770<br>(21,783) | 11,831,592<br>(62,934) | 4,598,000<br>(20,900) | 27,800<br>(200) |
| VERMONT | 9,938,330<br>(52,307) | 7,453,320<br>(39,228) | 1,387,064<br>(7,378) | 351,120<br>(1,596) | 430,483<br>(3,097) |
| VIRGINIA | 138,151,090<br>(727,111) | 98,356,160<br>(517,664) | 29,896,700<br>(159,025) | 1,016,180<br>(4,619) | 2,261,808<br>(16,272) |
| WASHINGTON | 169,119,000<br>(890,100) | 27,961,920<br>(147,168) | 111,621,052<br>(593,729) | 12,281,500<br>(55,825) | 7,049,107<br>(50,713) |
| W VIRGINIA | 14,344,050<br>(75,495) | 8,126,490<br>(42,771) | 3,647,388<br>(19,401) | 693,220<br>(3,151) | 1,277,827<br>(9,193) |
| WISCONSIN | 287,682,420<br>(1,514,118) | 83,178,010<br>(437,779) | 78,538,504<br>(417,758) | 20,290,820<br>(92,231) | 74,134,399<br>(533,341) |
| WYOMING | 13,502,540<br>(71,066) | 2,485,960<br>(13,084) | 9,330,816<br>(49,632) | 1,491,160<br>(6,778) | 186,399<br>(1,341) |
| US TOTAL | 9,492,965,060<br>(50,056,151) | 4,023,016,680<br>(21,173,772) | 3,687,765,888<br>(19,615,776) | 324,332,580<br>(1,474,239) | 775,860,748<br>(5,581,732) |

## Society of American Florists

### STATEMENT OF NANCY JACKS MONTGOMERY, DIRECTOR, GROWERS DIVISION

### ACCOMPANIED BY STEPHEN DAIGLER, DIRECTOR OF WHOLESALERS DIVISION

Senator MATTINGLY. Now we have Ms. Montgomery and Mr. Daigler from the Society of American Florists.

Ms. MONTGOMERY. My name is Nancy Jacks Montgomery. I am the director of the Growers Division for the Society of American Florists. With me is Steve Daigler, the director of the Wholesalers Division.

We would like to begin by thanking you for giving us the opportunity to speak to you today on behalf of the entire floral industry and the Society of American Florists.

The Society of American Florists is a trade association that represents the entire floral industry. Our approximately 9,000 members include growers, wholesalers, retailers and allied tradespeople, and 144 other floral industry trade associations whose memberships comprise an additional 22,000 businesses.

The USDA's Agricultural Research Service at Beltsville has conducted the necessary florist and nursery crops research for more than 40 years. In the late 1940's, the Beltsville staff began research on a wide range of crops that has included pioneering studies in genetics, crop improvement, and control of pests and diseases.

The floral industry wants to see the laboratory's beneficial work continue. However, our industry is very concerned because 40 years of deterioration has taken its toll on the greenhouses in the Beltsville Agricultural Research Center. While the laboratories and certain other facilities at the center are in good condition and provide invaluable research data, many of the greenhouses are outmoded, deteriorating and energy wasters.

These large structures do not have the small experimental units with associated environmental control required for modern-day research. Also, the greenhouses have not been adequately maintained over the years due to lack of funds, and as a result, they are in extremely poor condition with excessive air infiltration, and heating and cooling systems that are unable to maintain acceptable temperatures during the winter or summer.

Once again, as we did in 1982, our industry requests the subcommittee to appropriate funds in fiscal year 1987 to renovate the Beltsville facility so that the laboratories are adequate enough to continue conducting the necessary research.

The laboratory is currently working on a wide spectrum of activities that range from applied to basic research. The laboratory's pathology and entomology research is important to the floral industry's ability to improve the quality of floral products, which will enable our American growers to compete more vigorously with the foreign imports that share a large percentage of our market today.

Research is concurrently being done by the laboratory on citrus canker, gypsy moth, and leafminer infestations. The floral industry benefits by getting immediate help where crop losses are occurring as a result of insect pests and diseases. The leafminer has been a recurring pest problem in chrysanthemums in our industry for the past 40 years and has caused some great economic losses. It attacks more than 100 plant species throughout the United States and in many parts of the world as well.

Recognizing the high priority need for intensified leafminer research, the floral industry sponsored three national conferences on the problem and contributed more than $110,000 toward this research.

Through the development of better methods of disease diagnosis, pathogen elimination, and ways to reduce the spread of pests, the floral industry and other agricultural industries can become less reliant on expensive and hazardous chemicals. This becomes of primary concern to the horticulture and floral industry, because pesticides available for our use are becoming harder to acquire and because EPA restrictions are making it difficult for us to continue to rely on chemicals.

## SOURCES OF FUNDING

Our industry depends on the work being done by the florist and nursery crops laboratory. We recognize that in order to stay in business we must provide direct financial aid and support of the laboratory programs. During the past 4 years, this support through contributions of other floral associations has expanded, and last year totaled more than $100,000 for new crops, pathology, and entomology research.

Support of $50,000 a year for each of the next 5 years is being contributed by the floral industry for new crop development. This amount has been matched by the USDA Agricultural Research Service. The total of $500,000 is supporting collection and evaluation of a wide range of new species collected around the world.

The floral industry would like to do much more, but it is an industry of small businesses that cannot afford this independent research. With the facility at Beltsville already geared to this sort of research and the enormous amount of support we have already provided, we would like to know that our research is being conducted at facilities that offer the environmental conditions required to collect the solid, reliable research data.

The total plan for modernization facilities at Beltsville involves construction costs totaling some $25 million. However, in view of the many budget cuts that have resulted from Gramm-Rudman-Hollings, we are asking that only the first stage of this renovation project be funded at the present time. We request $965,000 be budgeted in fiscal year 1987, specifically for renovations to the Beltsville florist and nursery crops laboratory greenhouse structures where research is being conducted by the laboratory for our industry.

Government has traditionally helped industries by nurturing those that foster employment and economic growth. Our industry, from all indications, has been a true shining star in the agriculture scene of recent years. Certainly the $965,000 price tag for the much needed modernization of the florist and nursery crops laboratory at Beltsville can be justified in light of what our industry returns to the economy.

Again, I would like to thank you for the opportunity to speak to you this afternoon.

Senator MATTINGLY. Do you have any comments?

Mr. DAIGLER. No.

Senator MATTINGLY. Can I just ask how much of a benefit in dollars, a ballpark figure you might estimate, that the research program at Beltsville, MD, provides to the various members of the Society of American Florists on an annualized basis?

Ms. MONTGOMERY. From our members as a total?

Senator MATTINGLY. Right.

Ms. MONTGOMERY. I am sorry, I did not understand. The research in dollars it returns to our members or how much we benefit from it?

Senator MATTINGLY. How much is the dollar benefit from it, yes.

Ms. MONTGOMERY. I would have to submit that to the record later. I could not——

Senator MATTINGLY. Does the industry currently contribute directly to the funding of these programs?

Ms. MONTGOMERY. Our industry is currently contributing to the new crops program, which also entails some of the work that is being done in the entomology department with insect and disease resistant varieties. So we are matching what the ARS—ARS is matching our industry funds.

Senator MATTINGLY. Does the ARS support the improvements that are being requested?

Ms. MONTGOMERY. Yes; they do support the improvements that are being requested.

Senator MATTINGLY. Those are all the questions that I have. Thank you very much.

Ms. MONTGOMERY. Thank you.

[The statement of Ms. Montgomery follows:]

## Statement of Nancy Jacks Montgomery

### SUMMARY

1. The Society of American Florists requests that immediate attention be given to reconstruction and modernization of greenhouses occupied by the Florist and Nursery Crops Laboratory in Beltsville, Maryland. The Florist and Nursery Crops Laboratory occupies more greenhouse space than any other laboratory in the Beltsville research complex. The greenhouses are more than 40 years old and in disrepair.

2. Federal research in support of the multi-billion dollar floral industry must be in the forefront to meet international competition.

3. The Florist and Nursery Crops Laboratory has a record of achievement and research contributions that have resulted in financial support from industry in excess of $100,000 a year for Laboratory research programs.

4. The Society of American Florists requests $965,000 to modernize the greenhouses at Beltsville occupied by the Laboratory. This reconstruction plan will serve as a model for the renovation requirements of other laboratories.

5. Costs:

Renovation of five greenhouses 40' x 80' from commercial structures to research facilities

A. Divide 40'x 80' section into four cubicles, each with separate light and temperature control. Costs given for first greenhouse reconstructed:

| | | |
|---|---|---|
| 1. | New overhead structure | $ 66,000 |
| 2. | Heating and cooling (refrigeration) | 50,000 |
| 3. | Controlled lighting | 15,000 |
| 4. | Computer climate control | 25,000 |
| 5. | Electrical | 17,500 |
| 6. | Plumbing | 5,000 |
| 7. | Benches and drains | 12,000 |
| 8. | Architectural and enginering design | 32,000 |
| 9. | Demolition of existing structure | 7,500 |
| 10. | Overhead | 20,000 |
| | | $250,000 |

Each of four additional greenhouses would cost $135,000 each after initial costs allocated for design and engineering are included in the first greenhouse renovated.

B. Modernize four greenhouses 25' x 30'

| | | |
|---|---|---|
| 1. | New overhead structure | $ 58,000 |
| 2. | 1-10 (as above)--reduced cost without architectural cost and no refrigerated cooling | 117,000 |
| | | $175,000 |

### TESTIMONY

The Society of American Florists (SAF) is a trade association representing the entire floral industry. Our approximately 9,000 members include growers, wholesalers, retailers, allied tradespeople and 144 other floral industry trade associations, whose memberships comprise an additional 22,000 businesses.

The United States Department of Agriculture, Agricultural Research Service at Beltsville has conducted necessary florist and nursery crops research for more than 40 years. In the late 1940s, the Beltsville staff began research on a wide range of crops that has included pioneering studies in genetics for crop improvement and control of pests and diseases. The floral industry wants to see the laboratories' beneficial work continue.

Our industry is concerned because 40 years of deterioration has taken its toll on the greenhouses at the Beltsville Agricultural Research Center. While the laboratories and certain other facilities at the center are in good condition and provide invaluable research data, many of the greenhouses are outmoded, deteriorating and energy wasters. The structures are a standard commercial greenhouse design typical of the 1940s. These large structures do not have the small experimental units with associated environmental control required for modern research.

Also, the greenhouses have not been adequately maintained due to a lack of funds. As a result, many are in extremely poor condition with excessive air infiltration, and heating and cooling systems that are unable to maintain acceptable temperatures during the winter or summer.

Once again, as we did in 1982, our industry requests the subcommittee to appropriate funds in FY87 to renovate the Beltsville facility so that the laboratories are adequate to continue conducting research. The lab is currently working on a wide spectrum of activities that range from applied to basic research.

The Laboratory's pathology and entomology research is important to the floral industry's ability to improve the quality of floral products which will enable our American growers to compete more vigorously with foreign imports. Research is concurrently being done by the Lab on Citrus canker, Gypsy moth and leafminer infestations. The floral industry benefits by getting immediate help where crop losses are occurring as a result of insect pests and diseases. The leafminer has been a recurring pest problem in chrysanthemums and has caused significant economic losses during the past 40 years. The leafminer attacks more than 100 plant species throughout the United States and many parts of the world. In one year, for example, leafminer caused nearly $17 million in damage to one state's chrysanthemum crop. Recognizing the high priority need for intensified leafminer research, the floral industry sponsored three national conferences on the problem and contributed more than $110,000 to research.

Through the development of better methods of disease diagnosis, pathogen elimination and ways to reduce the spread of pests, the floral industry and other agricultural industries can become less reliant on expensive and hazardous chemicals. This becomes of primary concern to our floral industry because pesticides available for our use are becoming harder to acquire; and EPA restrictions are making it difficult for us to continue to rely on chemicals.

Our industry depends on the work being done by the Florist and Nursery Crops Laboratory. We recognize that in order to stay in business, we must provide direct financial aid in support of Florist and Nursery Crops Laboratory programs. During the past four years, this support through contributions of other floral associations has expanded and last year totaled more than $100,000 for new crops, pathology and entomology research.

Support of $50,000 a year, for each of the next five years, is being contributed by the floral industry for new crop development. This amount has been matched by the USDA Agricultural Research Service (ARS). This total of $500,000 is supporting collection and evaluation of a wide range of new species collected around the world.

In conjunction with the new crops program, an advisory committee to the Laboratory was formed in 1984 with the leadership provided by SAF. This groups gives generously of its time and money in order to meet every six months to review crop priorities and research results. The committee provides guidance on developing procedures to introduce each new crop. In addition to providing guidance on commercialization and production of new crops, the committee is involved in developing procedures for market analysis and consumer acceptance of each new crop. The floral industry would like to do more. But as I pointed out earlier, it is an industry of small businesses that cannot afford independent research. With the facility at Beltsville already geared to this sort of research, and the enormous amount of support our industry has already provided, we would like to know that our research is being conducted in facilities that can offer the environmental conditions required to collect solid reliable research results.

The total plan for modernization facilities at Beltsville involves construction of a 50,000 square foot growth chamber facility at a cost of $15 million and a 54,000 square foot greenhouse facility at a costs of $10-million.

However, in view of the many budget cuts that have resulted from Gramm-Rudman, we are asking that only the first stage of this renovation project be funded at this time. We request $965,000 be budgeted in FY87 specifically for renovations to the Beltsville Florists and Nursery Crops Laboratory greenhouse structures where research is being conducted by the Laboratory for our industry.

Government has traditionally helped industries by nurturing those that foster employment and economic growth. The 1979 Census of Horticultural Specialties reported on nearly 224,000 workers involved in basic horticultural production; wholesaling and retailing operations and the allied floral industries certainly add many more. Production for 1979 was valued at over $3.2 billion at the grower level; if the industry has kept pace with even farm level inflation since that period, it accounts for at least $4.4 billion in sales today. At retail, this figure is conservatively at least double. Our industry, from all indications, has been one of the few shining stars in the agricultural scene of recent years.

Certainly the $965,000 price tag for the much needed modernization of the Florist and Nursery Crops Laboratory at Beltsville can be justified in light of what our industry returns to the economy.

## AMERICAN ASSOCIATION OF NURSERYMEN, INC.

### STATEMENT OF BENJAMIN BOLUSKY

### ACCOMPANIED BY: DWAYNE JELNIK, DIRECTOR OF HORTICULTURAL RESEARCH AND GROWER SERVICES

Senator MATTINGLY. Mr. Benjamin Bolusky of the American Association of Nurserymen.

Mr. BOLUSKY. Thank you, Senator Mattingly. The American Association of Nurserymen welcomes this opportunity to present the views of the nursery industry regarding the fiscal year 1987 appropriations for the Department of Agriculture. Accompanying me this afternoon is Mr. Dwayne Jelnik, who is our director of horticultural research and grower services.

We have a rather lengthy and extensive statement, which I would submit for the record, and I would be more than happy to summarize and highlight for you.

Senator MATTINGLY. Good, please do.

Mr. BOLUSKY. The American Association of Nurserymen is the national trade organization of the nursery, landscape, and garden center industries. We represent more than 3,500 firms engaged in all aspects of the industry, including the grower, wholesale, and retail segments. By almost any standard, our members are primarily small family-owned farming businesses.

The nursery industry is the most visible branch of agriculture, and the demand for nursery products and the number of people employed in the industry is growing perhaps more than any other agricultural sector. We wish to emphasize that nursery products are a significant part of overall horticultural production, as horticultural crops are the fourth largest agricultural commodity.

As small business owners, we are committed to a significant reduction in the Federal deficit. Our members understand all too well what the deficit can do to our economy. However, AAN cannot support the wholesale elimination of modest, yet vital programs, simply because they represent dollar amounts easily rounded out of existence.

Traditionally, the nursery industry has never looked to the Government for handouts, and today is no exception. The nursery industry is prepared to make the necessary sacrifices to help achieve our country's economic goals. As a result, we have crafted our requests and recommendations here in our testimony to balance our desire for immediate cuts in the deficit with the critical need to maintain the integrity of programs absolutely vital to the nursery industry.

#### APPROPRIATIONS RECOMMENDATIONS

AAN strongly opposes the proposed elimination of the special grant funds for pesticide clearance and pesticide impact assessment. Due to the high cost of pesticide registration, many producers of so-called minor-use crops, including nurseries, frequently find themselves without adequate pesticides to meet quarantine requirements or market demand for high quality plants.

The Inter-Regional Project Number 4 [IR–4] has greatly assisted in obtaining more prompt pesticide registrations for nursery crops when such pesticides are already registered for use on food or feed crops. Cancellation of the IR–4 program will make it necessary for nurserymen and florists to wait 6 to 10 years for needed pesticide registrations, if they are ever granted at all.

We strongly urge this committee to provide the necessary $1.4 million to maintain the IR–4 clearance program. We also request $2 million for the National Agricultural Pesticide Impact Assessment Program.

With respect to the Animal and Plant Health Inspection Service, while there are no funds designated for the Japanese beetle quarantine under the proposed fiscal year 1987 budget for APHIS, there remains a limited, yet significant role for APHIS. It has the responsibility to certify nursery crops free of Japanese beetles in order to meet quarantine requirements for Canada, the principal foreign market for U.S. nursery plants.

However, since the cancellation of chlordane in 1979 for nursery uses, a pesticide has not been available during the production cycle to enable nurserymen to meet Canadian requirements.

AAN urges APHIS to continue negotiations with Agriculture Canada to modify the Japanese beetle quarantine and to ensure continued shipments of nursery stock to Canada. A multimillion-dollar market is rapidly being lost because American nurserymen are finding it more difficult to ship plants to Canada under existing quarantines.

Due to imported fire ant quarantine regulations in the South, some nurserymen cannot ship their plants outside infested areas. We urge that the imported fire ant program be continued at funding levels originally proposed by APHIS for fiscal year 1986, as AAN believes that total elimination of the program will create a problem situation much like that with the Japanese beetle.

We strongly endorse APHIS' proposed budget for agricultural quarantine inspection. Particularly as fewer and fewer pesticides become available for quarantine purposes, it is even more vital that APHIS' role be maintained.

With respect to the Extension Service: When the private Nursery Marketing Council recently sponsored exhaustive research and asked consumers all across America where they turn for accurate information about our products, the two most trusted sources were retail nursery firms and county Extension agents.

The nursery industry has never lined up for price supports or any of the other programs which have assisted some segments of agriculture over the years, but we do need help in research and relating our product to the consumer. There is no better asset to assist with this than the county Extension agent. It is for these reasons that we oppose the adminstration's fiscal year 1987 budget to reduce the Smith-Level 3(b) and 3(c) portions of the Extension Service, as well as the administration's proposal to eliminate the 3(d) programs, especially those dealing with pest management and pesticide impact assessment.

With respect to the Agricultural Research Service, we wish to thank Congress for its continued and increasing support of the programs of ARS.

With respect to the U.S. National Arboretum, we wish to also thank Congress for its recognition of the Arboretum as a national center of excellence in education and research concerning environmental plants. The additional appropriation last year of $500,000 assures that program advances made in recent years will not be lost. We hope such appropriations will continue.

In conclusion, Senator Mattingly, we believe that the Federal Government's contribution to research is a reasonable expenditure of Federal funds, particularly since nursery farmers neither ask for nor receive crop subsidies or other Federal support. We urge this committee and Congress as a whole to provide the critical funding as we have outlined.

Once again, Senator, we wish to thank you and this committee for the opportunity to present the views on behalf of the nursery industry.

Senator MATTINGLY. I want to thank you all very much. Do you also have a statement for the record that you would like to submit?

Mr. JELNIK. No.

Senator MATTINGLY. I want to thank you and the American Association of Nurserymen for your informative testimony, and your awareness of the battle that we are trying to wage, in trying to reduce the deficit. So your remarks are especially well taken. I want to thank you very, very much. Thank you.

Mr. BOLUSKY. Thank you, Senator.

[The statement of Mr. Bolusky follows:]

## STATEMENT OF BENJAMIN BOLUSKY

The American Association of Nurserymen welcomes this opportunity to present nursery industry views regarding FY87 appropriations for the Department of Agriculture.

The American Association of Nurserymen (AAN) is the national trade organization of the nursery, landscape and garden center industries. AAN represents more than 3,500 firms engaged in all aspects of the nursery industry -- including the grower, wholesale and retail segments. By almost any standard, our members are primarily small family-owned farming businesses.

The nursery industry is one of many diverse elements of the American agricultural community. The demand for nursery products and the number of people employed in the nursery industry is growing perhaps more than any other agricultural sector. Nursery production and marketing includes, but is not limited to the following:

A. Fruit and nut trees, berry plants and grapevines used by commercial growers and home gardeners.

B. Trees, shrubs, vines and groundcover plants used for landscape and environmental improvement.

C. Seedlings for production of Christmas trees and the reforestation of private woodlands.

D. Trees and other plants for windbreak and soil conservation plantings.

While some nursery firms specialize in producing plants, others specialize in landscaping, retail garden center operations, or mailorder businesses. Many firms combine two or more of these activities. Landscape, garden center and mailorder firms may produce a portion of the plants they sell, while the remainder are bought from production nurseries. Nursery plants are living organisms requiring care and protection from their beginnings in the production nurseries and continuing throughout the market channel.

Relative to all other branches of agriculture, the nursery industry indeed is the most visible. Products of the nursery segment of agriculture can be seen everywhere -- on city streets, in yards, around buildings and inside homes and offices.

We also wish to emphasize that nursery products are a significant part of overall horticultural production which is estimated to have a farm value of more than $16 billion. In fact, horticultural crops are the fourth largest agricultural commodity. In 1985, the nursery industry produced plants with an estimated wholesale value of $2 billion.

One of the major uses of nursery farming products is the protection, preservation and improvement of the quality of our environment. Trees and other landscape plants help prevent soil erosion. They can be used as windbreaks, to block unwanted sights and sounds, to remove pollutants from the air, and to conserve energy. Coupled with the satisfaction and added value derived from a well-landscaped residence or business, these functional uses of plants have substantially increased the demand for the products and services of the nursery trade over the last 15 years.

In view of the increasing demand for nursery products, and to ensure such will continue to be available for improving the quality of our environment and saving our valuable natural resources (such as soil, clean air, and energy,) the American Association of Nurserymen (AAN) has annually submitted testimony highlighting important areas of research which requires the immediate and serious attention of this committee and Congress as a whole.

At the same time, however, as small business owners, we are committed to a significant reduction in the federal deficit. Our members understand all too well what the deficit can do to our economy. We believe deficit reduction can best be achieved by an across-the-board freeze on all programs. By the same token, however, AAN cannot and will not support the wholesale elimination of modest, yet vital programs simply because they represent dollar amounts easily "rounded out" of existence. By nearly any measure, our country accrues more for its dollar from these modest and highly effective programs than from some of the "big ticket" budget items.

Traditionally, the nursery industry has never looked to the government for handouts, and today is no exception. The nursery industry is prepared to make the necessary sacrifices to help achieve our country's economic goals. As a result, we have painstakingly crafted our requests and recommendations herein to balance our desire for immediate cuts in the deficit with the critical need to maintain the integrity of programs absolutely vital to the nursery industry.

## MINOR USE PESTICIDE PROGRAM

The American Association of Nurserymen strongly opposes the proposed total elimination of the special grant funds for Pesticide Clearance and Pesticide Impact Assessment. Due to the high cost of pesticide registration, many producers of so-called minor use crops, such as those produced in nurseries, frequently find themselves without adequate pesticides to meet quarantine requirements or market demand for high quality plants. Chemical companies are reluctant to spend large sums of money necessary to obtain registrations for pesticides to be used on nursery and other minor use crops since they do not have large volume potential such as wheat and corn.

### Inter-Regional Project #4 (IR-4)

For the past eight years, this Cooperative State Research Service special research grant program of pesticide clearance has greatly assisted in obtaining more prompt pesticide~~ registrat~~ions for nursery crops when such pesticides are already registered for use on food or feed crops. Cancellation of the IR-4 program, which costs approximately $1.4 million per year, will make it necessary for nurserymen and florists to wait six to ten years for needed pesticide registrations -- if they are granted at all.

We strongly urge the Congress to provide the necessary $1.4 million to maintain the IR-4 pesticide clearance program. We also request $2 million for the National Agricultural Pesticide Impact Assessment program. This request is made with the understanding that a fair share of the funding is used for "ornamental" pesticide uses.

## AGRICULTURAL RESEARCH SERVICE

We wish to thank Congress for its continued and increasing support of the programs of the Agricultural Research Service. Likewise, as evidenced by continued ARS budget increases, we thank the Administration for its recognition of the importance of agricultural research in general, as well as research on plant productivity. The American Association of Nurserymen is supportive of ARS as a whole, particularly its research programs on plant productivity affecting horticultural crops, including those produced by the nursery farming community.

We wish to emphasize the need for an integrated, interdisciplinary approach in support of research involving products of the nursery trade -- plants which improve and enhance the quality of man's environment. Likewise, this research should include the important area of water management. We believe ARS needs to strengthen and reinforce existing nursery crops research programs, but not at the expense of traditional research positions. AAN urges that $450,000 be allocated within the proposed ARS Plant Productivity Budget to assure that the nursery crops research programs are so strengthened and reinforced.

### U. S. National Arboretum

We wish to thank the Congress for its recognition of the U. S. National Arboretum as a national center of excellence in education and research concerning environmental plants. The additional appropriation of

$500,000 in 1985 assures that program advances made in recent years will not be lost.

However, we feel that we must emphasize to the Agricultural Research Service that they recognize the need for continued nursery crops research at the U. S. National Arboretum. As such, AAN concurs with the recommendation of the U.S. National Arboretum Advisory Council for the establishment of a germ plasm repository for environmental plants. We urge the Congress to allocate $200,000 for the establishment of this clonal repository.

We strongly support movement of that portion of the Arboretum Herbarium that does not directly relate to activities at the Arboretum. Moving these materials in combination with installation of compactors for the materials remaining will free up valuable space that can be used as research offices and laboratories -- two seriously lacking facilities currently.

### Florist and Nursery Crops Laboratory, Beltsville, MD

As you are aware, as technological advancements are made, there is a continuing need for improving and upgrading research facilities, including renovation and modernization of greenhouses. AAN supports the necessary funding for the improvement of ARS research facilities in general, and specifically the greenhouses occupied by the Florists and Nursery Crops Laboratory at Beltsville, Maryland.

These greenhouses were built more than 40 years ago and have since never been modified or updated. In addition, they have not been adequately maintained due to a lack of funds. As a result, many are in very poor condition with excessive air infiltration, heating systems unable to maintain acceptable temperatures, and cooling systems incapable of maintaining temperatures at a reasonable level during the summer. In addition, the present design makes it difficult to isolate different types of research and, the physical isolation required to conduct controlled experiments on pests and diseases is simply impossible. We thus urge the Congress to appropriate $1 million for renovation of some of the existing greenhouses, including those currently occupied by the Florists and Nursery Crops Laboratory.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

### Gypsy Moth

Nursery plants are often regulated to protect other agricultural crops,(as well as forest and landscape plants about our homes, offices, parks and along our highways) from pests that are not serious pests of nursery crops. Gypsy moth is such a pest. Three years ago the American Association of Nurserymen endorsed a modification in the gypsy moth quarantine which placed the movement of outdoor household furniture from regulated gypsy moth areas under regulations. As gypsy moth continues to spread into heretofore uninfested states, it is important that APHIS play a very strong role in preventing such spread. APHIS must continue its leadership role with the State Departments of Agricultue of those fortunate states which have not had to contend with this ravenous pest. There is a continuing need for APHIS to be involved in gypsy moth quarantine activities and to serve as an arbitrator in working out regulations between infested and noninfested states.

We support the increased funding for APHIS gypsy moth programs and closer monitoring of outdoor household furniture as it is moved throughout the country. Compliance with this program has apparently improved during 1986, but to be effective in preventing the spread of gypsy moth, monitoring must be strengthened and more training programs for inspectors must be developed.

### Japanese Beetle

While there are no funds designated for the Japanese beetle quarantine under the proposed FY87 budget for APHIS (just as there were none in 1985 and 1986), there remains a limited, yet significant, role for APHIS in coordinating information regarding the natural spread of the pest. APHIS also has the responsibility to certify nursery crops free of Japanese beetle in order to meet quarantine requirements for Canada, the principal foreign market for U. S. nursery plants. However, since the 1979 cancellation of chlordane for nursery uses a pesticide has not been available during the production cycle to enable nurserymen to meet Canadian requirements. ARS has conducted considerable research to find a suitable replacement. But until a replacement pesticide is approved, American nurserymen are forced to resort to using expensive pesticides applied to individual plants in an impractical manner. This is not without serious applicator and environmental hazards.

AAN urges APHIS to continue negotiations with Agriculture Canada to modify the Japanese beetle quarantine and to insure continued shipments of nursery stock to Canada. A multi-million dollar market is rapidly being lost since American nurserymen are unable to ship plants to Canada under existing quarantines. AAN also urges ARS to continue pesticide tests on both field and container grown nursery crops with a continued commitment to finding pesticides to enable nursery farmers to meet quarantine requirements for Japanese beetle and other pests on shipments to Canada.

## Imported Fire Ant

Due to Imported Fire Ant Quarantine Regulations in the South, some nurserymen cannot ship their plants outside infested areas. AAN urges that the Imported Fire Ant Program be continued at funding levels orginally proposed by APHIS for FY86. AAN believes that total elimination of the program will create a problem situation much like that with Japanese beetle. AAN also urges APHIS to include nursery uses in the improved control and regulatory techniques program for Imported Fire Ant.

## Witchweed

Witchweed is still another imported pest which, while not a pest of nursery crops, would be a devastating pest to the nation's corn crops if it were to spread by some means from the limited infested areas in North and South Carolina to the major corn producing areas. Close cooperation of North and South Carolina with APHIS has not only limited the spread of this pest naturally, but has permitted eradication from limited portions of the area once infested. Since corn is a major agricultural crop, and is also one of our major export crops, this quarantine is vital to the entire country and should not become the sole responsibility of North and South Carolina. We therefore believe that this budget item should not be eliminated, but should be maintained at FY86 funding levels.

## Agricultural Inspection

It is the objective of APHIS to protect the nation's animal and plant resources from artificial introduction and spread of hazardous insects and diseases. Therefore, Congress, the Administration and citizens of the United States should look upon the role of APHIS as preventative in purpose. APHIS has been successful in preventing the artificial introduction of many of the world's most destructive plant insects and diseases. Despite tight budgets, APHIS continues to be very innovative in either eradicating those few new introductions of plant pests or successfully retarding the spread of new pests until acceptable means of controlling them economically have been determined. The American Association of Nurserymen fears we are fast approaching (if we have not already reached) the reduced budget level whereby further innovative efforts will be detered.

The AAN commends APHIS for its innovative efforts to maintain and improve its effectiveness in preventing the introduction of foreign animal and plant health pests not now in the United States. Foreign arrival-baggage and port-of-entry inspections continue to be important warranties against accidental introduction of foreign agricultural pests. Although AAN supports overall federal budget reductions in the interest of protecting American agriculture, we also strongly endorse APHIS' proposed budget for agricultural quarantine inspection. In recent years, outbreaks of Medfly, Oriental fruit fly and citrus canker confirm that increased funding is necessary to continually prevent harmful pests from entering the United States. Furthermore, as fewer and fewer pesticides become available for quarantine purposes, it is even more vital that APHIS' role be maintained.

## COOPERATIVE STATE RESEARCH SERVICE

The State Agricultural Experiment Station system performs nearly 60% of agricultural research in the United States. This successful system is the result of a balanced blending of local, state and federal interests, personnel, funding, program development and administration. It continues to be most effective. As mentioned in the introduction, the AAN supports an across-the-board freeze on all programs -- Hatch Act formula funds are not an exception. As always, we also urge directors of the State Agricultural Experiment Station to fairly fund research classified as "Research Program 3:15 Plants to Enhance the Environment."

## EXTENSION SERVICE

The private Nursery Marketing Council (NMC) supplies the nursery industry with professional advertising and public relations activities to increase the sale of plants and related products and services. When NMC recently sponsored exhaustive research and asked consumers all across North America where they turn for accurate information about our products, the two most trusted sources, (by a considerable margin) were retail nursery firms and County Extension Agents. These extension agents are a logical point of dependability for those seeking information about a fairly complicated product, and we, the nursery industry, are fortunate they are there.

More and more extension agents across the country find themselves in or surrounded by urban areas where one of the main agricultural problems facing people is no longer the growing of commercial crops, but rather the care and feeding of trees, plants and shrubs. In fact, this is precisely why AAN has been attempting for many years to convince the Department of Agriculture that its most public product is grown by the nursery farming community.

The extension agent, who means so much to the nursery industry, is a county employee whose cost is shared with the state government and the United States Department of Agriculture. The nursery industry has never lined up for price supports or any of the other programs which have assisted some segments of agriculture over the years, but we do need help in research and relating our product to the consumer. There is no better asset to assist with the latter than the county extension agent. It is for these reasons that AAN opposes the Administration's FY87 budget to reduce the Smith-Lever (3b and 3c) portion of the Extension Service.

AAN also disagrees with the proposal to eliminate totally all Smith-Lever Act 3(d) programs, especially those dealing with Pest Management and Pesticide Impact Assessment. Since chemicals remain an important agricultural pest suppression tool, continued evaluation of materials used for this purpose is essential to the protection of America's agricultural products. Funds for this purpose are also critical to the ability of Extension Service Agents to alert nursery farmers and others as to the correct timing for application of pesticides in order to maximize their effectiveness of suppression. AAN urges Congress to fund, at least at the FY86 level, the Smith-Lever portion of the Extension Service budget as well as the two important programs mentioned above.

We believe that the federal government's contribution to research is a reasonable expenditure of federal funds, particularly since nursery farmers neither ask for, nor receive, crop subsidies or other federal support. AAN urges Congress to provide the critical funding as outlined herein. Once again, we thank you, Mr. Chairman, for this opportunity to present the views of the nursery industry with respect to agricultural research.

## NATIONAL FOOD PROCESSORS ASSOCIATION

### STATEMENT OF LAWRENCE GRAHAM, EXECUTIVE VICE PRESIDENT

### ACCOMPANIED BY DICK FARRELL, SENIOR VICE PRESIDENT AND GENERAL MANAGER, EASTERN RESEARCH LABORATORY

Senator MATTINGLY. Mr. Lawrence Graham, the executive vice president of the National Food Processors Association. If you would submit your statement for the record and sort of brief us, it would be appreciated.

Mr. GRAHAM. I am Lawrence Graham, executive vice president of the National Food Processors Association. I am accompanied by Dick Farrell, who is the senior vice president and general manager of our Eastern Research Laboratory.

We represent about 600 member companies that pack processed and prepared fruits and vegetables, meats, fish, and specialty products, including canned, frozen, dehydrated, and other preserved food items. Also included among our members are companies that provide equipment and supplies and services to the industry.

We also operate two food research laboratories with over 100 employees, conducting studies on food safety, nutrients, and innovative technology.

We are here today to speak about FDA. There is a broad consensus, we believe, in the processed food industry that a technically sound and scientifically competent staff at FDA is clearly in the best interest of the Nation and the industry. Food safety responsibilities of the agency require a skilled professional staff which is trusted by the public and which has access to the most modern scientific equipment.

We would like to highlight today very briefly why FDA programs are important to the food industry. Budget trends since 1978 are hampering the effectiveness of FDA food related programs. We feel most strongly that funding levels for fiscal year 1987 for FDA food programs must not fall below the level requested by the administration. Sufficient resources are needed at FDA to fund a staff experienced and knowledgeable in food processing as well as the basic scientific discipline.

Staff declines at FDA's Center for Science and Applied Nutrition are a growing problem. The staff ceilings in terms of full-time equivalents have decreased steadily since 1978 from approximately 1,000 FTE's to the current 809 FTE's.

Furthermore, the average age of the Center for Science and Applied Nutrition's staff has increased from 43 years in 1982 to almost 46 years in 1986, as a result of the continuing freeze on replacement of staff vacancies.

If this trend persists, we believe that the pool of experienced professionals will continue to shrink rapidly in the coming years due to retirement and other factors. The future strength of FDA depends upon attracting a corps of qualified younger scientists. The field staff also has declined from 1979 to 1986 and is slated for further reduction. As the complexity of the markets that FDA is charged with overseeing grows, so should the field staff. Not only does the increase in new drug and food products support this idea, but so does the growing problem of food and drug tampering. This is an area of possible criminal activity and our main line of defense is the FDA.

Once again, we must argue that the joint goals of protecting the public health and promoting economic activity demand that FDA be provided with the resources necessary to guard against unsafe products finding their way onto retail shelves.

FDA's expertise, as I am sure you are aware, proved invaluable in resolving a recent case of allegations of glass in Gerber baby food. The FDA was able to confirm the safety of the manufactured product within the first 24 hours after the reported problem.

### FOODBORNE BIOLOGICAL HAZARDS PROGRAM

The foodborne biological hazards program at FDA is another function of critical importance in ensuring the public of a safe food supply. Again, however, shortage of manpower has resulted in less monitoring than desirable and a shift of responsibility to the States. Since the food industry is so heavily involved in interstate commerce, this could become a problem.

The low-acid canned foods registration and processed filing requirements are also important. This program provides the only practical way of monitoring the safety of low-acid canned products in the thousands of U.S. and foreign plants involved in this segment of the industry. This procedure, we believe, is cost effective and is crucial in terms of public health.

Also directly linked to new technological development in the industry is the FDA's food additive programs. The public is demanding new types of products in more convenient forms of packaging and preparation. The food industry is responding. However, our ability to respond will be hampered if FDA is unable to provide premarket approval services on a timely basis. The competitive nature of the marketplace requires prompt action by FDA in this area.

Another area of basic research which is directly tied to public health is the chemical contaminant program. The presence of various chemicals and pesticides and other toxins in food products is obviously something the industry works on to eliminate. We do all we can to protect the public, but a sound Government program is essential if the public is to feel truly confident about the safety of the Nation's food supply.

To summarize, the National Food Processors Association supports funding for FDA at a level which will ensure the following: a technically and scientifically competent staff at FDA who have the opportunity to conduct appropriate research and access to up-to-date equipment; a surveillance capability at FDA adequate for protecting public health, as well as reassuring the public that the food supply is safe; speedy decisionmaking in the area of premarket clearance of new technology; adequate surveillance of imports to ensure their safety; and sufficient resources to enable the FDA to maintain its predominant role in oversight of interstate commerce.

Indeed, our food supply is one of the safest in the world, and our members are committed to doing all they can to produce wholesome products, but we need the help of FDA if public confidence is to be maintained.

I thank you, Senator, for allowing me to appear here today.

Senator MATTINGLY. Thank you. I think we all agree on the need to maintain the effective FDA programs and to ensure the safety of food and the credibility of the industry. I join you in hoping that we can maintain the overall agency budgets at or above the current service levels. Maybe if you can help us improve the food safety and inspection procedure, we can move part of that money from FSIS over to FDA, which handles about 70 percent of the products.

Thank you very much for your testimony.

## AMERICAN VETERINARY MEDICAL ASSOCIATION

### STATEMENT OF DALE K. SORENSEN

Senator MATTINGLY. Dr. Dale Sorensen, from the American Veterinary Medical Association.

Dr. SORENSEN. Senator Mattingly, I would like to thank you for this opportunity to present the views of the American Veterinary Medical Association and their recommendations on the fiscal year 1987 appropriations to the U.S. Department of Agriculture.

As you are aware, animal health has a very profound effect on agricultural productivity and profitability, and it also affects the health of people. There are several USDA programs that specifically address these vital areas, and yet these programs have either been slated for cutbacks in the fiscal year 1987 appropriations or for outright elimination.

I would like to very briefly highlight support for five of these programs.

First, is Animal and Plant Health Inspection Service livestock disease control, which also includes the animal biologic product regulation. Second, APHIS' enforcement of the Animal Welfare Act. Third, the animal health and disease research programs which are supported by CSRS. Fourth, the higher education graduate fellowships. I should point out that these last two have been totally eliminated from the administration's proposed budget. Fifth, the meat and poultry inspection activities of the FSIS.

Just reviewing each one of these programs very briefly, APHIS has been every effective and productive in controlling livestock diseases. This has been in cooperation with the States and the private sector. In fact, as you know, there has been a partnership between the Federal and State governments in the control of livestock diseases. The administration is continuing to push the States and the private sector—the livestock producers—to carry larger shares of the responsibility with a diminishing Federal involvement in these disease control programs.

We are concerned that neither the States nor the livestock producers will be able to support these programs without continued Federal participation.

Another issue in recent rulings by the Office of Management and Budget might hamper USDA's ability to respond effectively to control animal disease emergencies. Specifically, OMB has ruled that USDA cannot use Commodity Credit Corporation funds to finance disease control and eradication activities in an emergency situation. We seem to have emergency situations arising almost on an annual basis.

You may recall the outbreaks in 1983 and 1985, and the outbreaks in the Western States in 1982 and 1983.

We feel that some source of emergency funding must remain available to permit the immediate and effective response to these disease situations.

Another issue is that the Federal Government must maintain a strong role in the brucellosis eradication program. This has been very effective over the years. At the present time, there are only two States that have infection rates greater than 1 percent, so that 48 of the States have brucellosis at a very, very low level. This is a critical stage in the overall disease eradication program for brucellosis. We feel that if Federal support is cut, the States with the lower incidence of disease will probably try to maintain that status, but the States with higher incidence may not try to maintain that status, so we may have some problems developing resulting in restriction of interstate commerce. We feel that the Federal Government should present funding which is able to ensure adequate herd testing in depopulation and vaccination, which are all the essential elements in an eradication program.

We also feel that the APHIS animal biologics regulatory program, which exists to protect the public and livestock health, should continue, and we should have funds to continue the operation at the present level.

Senator MATTINGLY. If I may interrupt, you may want to submit your total statement for the record, and then you can give a brief summary.

### FURTHER RECOMMENDATIONS

Dr. SORENSEN. I would just like to highlight the urgent need for funds for carrying out the provisions of the Animal Welfare Act. As you know, the Federal budget is proposing a drastic reduction in this. In fiscal year 1985, APHIS spent $5.9 million to carry out its duties. Also the farm bill, which was recently adopted, had a provision in there to add a new service, which is going to cost about $750,000 for fiscal year 1987. We are recommending the funding level of 1985 plus an additional $750,000 to maintain the new provisions of the farm bill.

An important one that I would like to highlight is the funding for the animal health and disease research. The new recommendations call for the elimination of the Section 1433 Animal Health Program, as well as the special grants program. The total amount of money involved in that is just a little less than $12 million. This represents about 60 percent of all the Federal support, excluding ARS, for animal health and disease research. This would very drastically reduce the level of animal health research, and we feel it is very essential that be restored, and we also thank this committee for restoring this in the past and in supporting this particular issue.

I would also like to mention that an important consideration here needs to be the development of the graduate fellowship programs for fiscal year 1987. This has been eliminated in the budget. We feel we must continue to maintain a strong scientific community and that in order to do that, we need these graduate fellowship programs.

In summary, we support the recommendations of the National Association of State Universities and Land-Grant Colleges that Dr. Osbun previously testified to, so that we have in the record support of these particular programs at the same level that he mentioned.

The meat and poultry inspection programs are also in some jeopardy with the cutback in the level of funding. Again, Congress or the executive branch urged that user fees be used rather than congressional funding. We would like to urge that this be reconsidered and that in order to maintain this highly vital service, we have increased appropriations.

In closing, we would like to thank the committee for its support in these five programs and note that in the past this committee has been very supportive of these programs.

Thank you, Senator.

Senator MATTINGLY. Thank you for your remarks. I think the record demonstrates this committee's recognition of the importance of the APHIS programs and the CSRS grants. I am certain we are going to do our best again this year, without adding new fees to poultry and meat inspections.

Thank you very much.

[The statement of Dr. Sorensen follows:]

## STATEMENT OF DALE K. SORENSEN

Mr. Chairman and members of the subcommittee, I would like to thank you for the opportunity to present the American Veterinary Medical Association's recommendations for the FY 1987 appropriations for the United States Department of Agriculture.

Animal health frequently affects the health of people as well as agricultural productivity and profitability. Several USDA programs address this vital area, yet have been slated for cutbacks or outright elimination in the administration's proposed budget.

We recommend strong support for the following major programs:

- Animal and Plant Health Inspection Service (APHIS) livestock disease control including animal biologic product regulation
- Animal Welfare Act enforcement by APHIS
- Animal health and disease research supported by Cooperative State Research Service (CSRS) grants
- Higher education graduate fellowships
- Meat and poultry inspection activities of the Food Safety and Inspection Service (FSIS)

APHIS has been effective and productive in controlling livestock diseases in cooperation with the states and private practicing veterinarians. The administration continues to push the states and livestock producers to carry larger shares of the responsibility with diminished federal involvement. We are doubtful that the livestock producers will be able to maintain these programs without substantial federal participation.

Recent rulings by the Office of Management and Budget may cripple USDA's ability to respond effectively to control animal disease emergencies. OMB has ruled that USDA cannot use Commodity Credit Corporation funds to finance disease control and eradication activities in an emergency situation. Some source of emergency funding must remain available to permit immediate, effective response to dangerous disease situations.

The federal government must maintain a strong role in the brucellosis eradication program. If federal support is drastically cut, states with low incidence of the disease will try to maintain that status by limiting the interstate shipment of cattle, and thus restrict interstate commerce. AVMA recommends that the present funding level be maintained to ensure adequate herd testing, infected herd depopulation, first point-of-concentration testing and calfhood vaccination -- all essential elements in eradicating the disease.

The APHIS animal biologics regulatory program exists to protect public and livestock health. Funds for its operation should continue to be appropriated by the Congress.

The budget proposes again to eliminate funds for enforcement of the Animal Welfare Act. The administration expects the states and humane organizations to carry out the enforcement activities. Scarce resources and wildly differing standards render this an impossible expectation. We understand that APHIS spent $5,898,850 in FY 1985 to carry out its duties as prescribed by the Animal Welfare Act -- a comparatively modest sum in view of the signficance of the national inspection program. In December, 1985, Congress adopted amendments to the Act that require the establishment of a laboratory animal welfare information service at the National Agriculture Library in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to start the service in FY 1987. For the Animal Welfare Act, we recommend an appropriation of $6,648,850 for FY 1987. This sum is the minimum required to carry out APHIS responsibilities for enforcing the Act and implementing the newly mandated information service.

In the budget for science and education, our concerns center on funding for animal health and disease research. Prior to FY 1979, a limited amount of animal health and disease research was carried out in veterinary medical institutions through the Hatch Act program. The first federal program specifically designed for animal health and disease research in veterinary medical institutions, excluding the Agricultural Research Service, was first authorized in the 1977 farm bill. Since then, the animal health and disease research (Sec. 1433) and special grants programs have had a marked, positive impact on the amount of animal health research being conducted. The advances spawned by this research benefit both humans and animals.

The wealth of veterinary scientific manpower available in our nation would address many more animal disease problems, if financial support were available. Livestock disease problems exact a large economic toll, and this veterinary manpower resource, currently untapped, could produce beneficial results if given the opportunity.

A permanent funding base to the Section 1433 program is essential to provide a foundation for research capabilities, which can then be built upon with targeted research supported by competitive-type grants. This program is used in different ways in different institutions, depending on their most critical needs. The support may be used to fund exploratory research, work on local disease problems or help maintain food animal herds for research.

AVMA supports the effort to bring greater emphasis to the application of biotechnology to agriculture. The competitive grants program is an excellent vehicle for this effort. The competitive-type research grant program authorized in Section 1434 would also work well in applying biotechnology principles to animal health and disease problems.

We also recommend a continuation of the special grants program under the current format. The competitively reviewed animal health and disease research component of this program is an important element in USDA's extramural research.

All these research activities, necessitate a continued recognition of the unique resources that veterinary schools and veterinary science departments offer. The considerable biomedical and biotechnological resources at medical schools and other research institutions may apply to animal agriculture, but research on the diseases of food animals must ultimately be done with these animals, in the institutions that have the expertise. There is no question that this is expensive research, but the payoffs for the nation's agriculture and, ultimately, the consumer will be substantial.

The need to develop scientists for the future is a growing concern, shared by veterinary medicine. The initial funding of the graduate fellowship program in fiscal 1984 was an important step, and we strongly encourage the continuation of the program in 1987.

We support the recommendations of the National Association of State Universities and Land Grant Colleges regarding funding for these research programs in 1987. We urge the subcommittee to support research and education at these levels so that our agricultural research community will continue to make progress toward the control and prevention of the variety of diseases that hinder the livestock industries.

Our specific funding recommendations are:

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|---|---|---|
| Hatch Act | $164.3 | million |
| Animal Health (Section 1433) | 6.0 | million |
| Animal Health (Special Grants) | 5.964 | million |
| Graduate Fellowships | 5.0 | million |

The meat and poultry inspection programs of the Food Safety and Inspection Service are very basic national and international public health protection activities. Their traditional effective operations must be continued and new technologies must be utilized to assure the safety of meat and poultry products. Furthermore, consumers must learn what protection they may expect from inspection activities, and what responsibilities they must assume for themselves. We concur in the recommendations of the National Association of Federal Veterinarians regarding funding for meat and poultry inspection include the following:

- $380 million be appropriated for FY operation of FSIS.
- A national education program be established to inform consumers about safety measures for handling red meat and poultry.
- Congress appropriate funding for the program, rather than depend on user fees.

The preceding remarks summarize the recommendations of the American Veterinary Medical Association for the Department of Agriculture for FY 1987. These critical programs affect our nation's health and economic well-being. It is imperative that they continue to be supported by the Congress for FY 1987.

## NATIONAL ASSOCIATION OF FEDERAL VETERINARIANS

### STATEMENT OF DR. EDWARD L. MENNING, EXECUTIVE VICE PRESIDENT

Senator MATTINGLY. Dr. Menning of the National Association of Federal Veterinarians. Welcome.

Dr. MENNING. Thank you, Senator Mattingly. Realizing that our complete statement has been submitted for the record, I shall summarize my summary.

Senator MATTINGLY. Thank you.

Dr. MENNING. Needless to say, we as a group of federally employed veterinarians are involved in public health and regulatory veterinary medicine, not in private clinical practice. Because of this, our concern is high for brucellosis control and animal welfare funding for APHIS, as well as for biologics, especially genetically engineered vaccines, et cetera. I am not going to mention those, however, even in the summary.

What I would like to highlight, by not mentioning the others is our extreme concern for human health. I mention this because just not so long ago when I got through speaking somewhere, I was thanked for my concerns about veterinarians. I have no concerns about veterinarians. We have not lost one job even under the budget cuts for our association. We are concerned about human health.

The technology for slaughter in both chicken and red meat plants has progressed logarithmically in the past couple decades. However, the equipment to control contamination and/or diagnose human disease from those meats and poultry has not only not progressed at all, if anything it has regressed. Indeed, even as we sit here speaking, great political, as well as industrial pressure, is being brought to bear to allow more and more contamination and more diseased birds and beef to pass through the system. This is fact and can be backed by data.

According to the USDA Economic Research Service—and this is about human health—over 4 million people—and this we believe is a minimal number—become sick from salmonellosis and campylobacteriosis each year. That is a large number of persons, and certainly not insignificant public healthwise.

That would average out then, in the data from Economic Research, about 10 people per day die. Now, when one person got cyanide in one capsule of Tylenol, it caused a knee-jerk reaction in Congress. There was mass media coverage. FDA went wild, and the whole pharmaceutical industry went wild. We have 10 people dying each day just from salmonella and campylobacter in the United States. Of that, over four are directly attributable to beef and chickens. So beef and chickens are killing, directly or indirectly, four people per day.

According to USDA Economic Research data, approximately 3,300 babies in the United States are born each year with severely—and I say, severely—retarded conditions and/or eye problems due to congenital toxoplasmosis. Of that, five births of these severely deformed babies per day are attributed to pork.

None of these data include any of these diseases I have mentioned in species other than what I have mentioned, or the 10 other or so diseases in these species that are easily and knowingly transmitted by meat and poultry in the United States.

Moneywise, it has just been recently calculated that diarrhea is costing the U.S. economy $80 to $164 billion per year. This can no longer be said to be just a little loose stool among friends, or as the British used to say, a cathartic that periodically is good for you.

Finally, these enteric organisms have now been shown to produce severe chronic effect, arthritis, rheumatoid conditions, ileitis, colitis, endocarditis, food allergies, and maybe even neoplastic disease. To conclude, the 18,000 people in Chicago who got salmonellosis now have over 2-percent increase of rheumatoid conditions which have already begun.

I just would hope that this data is going to receive some attention by various groups and that a rational, nonhysterical, national education program and a more scientifically based meat and poultry inspection program could be instituted.

Mr. Chairman, we thank you for this opportunity.

Senator MATTINGLY. I want to thank you very much for your very interesting testimony. I have no questions.

[The statement of Dr. Menning follows:]

## STATEMENT OF EDWARD L. MENNING

Mr. Chairman, members of the Committee, the National Association of Federal Veterinarians appriciates this opportunity to discuss several specifics of the FY-87 USDA appropriations.

Prevention is best and usually prevention is less costly.

### USDA - FOOD SAFETY INSPECTION SERVICE

### "Gramm-Rudman-Hollings" Act

The effects of Gramm-Rudmann-Hollings has already been devastating to FSIS.
1) There are now 127 veterinary medical officer vacancies resulting in inadequate supervision of inspectors;
2) There will be 600 inspector vacancies by September 30, 1986;
3) A new streamlined poultry inspection (SIS) was instituted that reduced inspectors from 3 to 2. These two now must inspect birds going past them at 90 birds per minute. Data shows that hundreds of cancerous and other diseased conditions of birds are now escaping inspection on each shift of some plants;
4) The "second" veterinarian on shifts of large poultry plants is being moved to other plants with vacancies;
5) Industry and political pressure is, as we speak, lobbying hard to allow increases to the allowance for ingesta and fecal particles on carcasses;
6) Political pressure was brought to bear to furlough (illegally, we believe) on holidays so plants would not be shut down.

### Red Meat/Poultry Foodborne Disease

The following background information is critical to this entire issue of decreasing regulatory control. Technology of slaughter equipment speed has progressed rapidly over the past 30 years. The technology of preventing contamination from these rapid machines (namely in the scalding vats, feather pickers, tearing of intestines, chill tanks and cutting saws) has not progressed at all resulting in more and more disease organisms being shipped every where. Meanwhile, the public by and large remains unaware and uneducated about the proper way they must handle their red meat and poultry if they are to assure their safety in their own homes.

According to USDA Economic Research Service data estimates, an average of over 10 people die each day from Salmonellosis and Campylobacteriosis in the United States. Of these, over 3 per day are attributed to beef and chicken. About 10 children, on average, are estimated to be born daily with severe eye or brain damage due to toxoplasmosis and of these about half or 5 per day are attributed to pork. These data do not include anywhere near all diseases in all species of food animals.

Recommendation - A rational, nonhysterical, national education program should be mandated.

### User Fees

User fees as a method of funding the Meat and Poultry Inspection Program should not be allowed.

The purpose of this inspection is for food safety and consumer protection. As such it is and must be mandated by the federal government. It must also be totally controlled by the federal government if it is to be objectively and safely enforced.

Even under the present system, some companies attempt to coerce inspectors, try to have weakened controls and request inspection personnel to be moved when they are perceived as being too strict. Under any type user fee, logic screams out that all of these efforts by companies would become not only more frequent but would probably be more successful.

Meat inspection cannot be uniformly provided by lower government units and certainly cannot be provided by consumers themselves. To give the regulated industry the responsibility for funding is to give them an essence of control. This did not work with poultry inspection in the 1950s. It did not work with meat inspection in 1947. It will not work now.

Recommendation - FSIS should be funded at $380 million.
Only $1.75 per American per year is quite reasonable to pay for a good program

evaluating all the beef, pork, chicken, goat, lamb, duck and geese that are processed, imported, exported and consumed in the United States.

## USDA - ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### Animal Welfare

Abolishment of funding for the animal welfare program within the Animal and Plant Health Inspection Service must not be allowed.

Animal walfare must be strengthened rather than abolished. Animal welfare is obviously needed for the animals' benefit. It, however, is equally necessary for human benefits which result from more reliable research data that evolve from uniformly well cared for and healthy animals.

To even consider that humane societies or state or local government agencies could accomplish these tasks is unreal. They do not have the trained people, they do not have the resources, they do not have the objectivity and they do not have the authority.

Recommendation - Unless we wish to revert to the dark ages of animal research, a minimum of $6.8 million should be appropriated.

### Biologics

The greatly increased workload brought about by the 1985 Virus-Serum-Toxin Act plus the advent of logarithmically increasing biotechnology dictates no user fees and a larger budget. The safety and efficacy of genetically engineered bacteria and viruses must be properly regulated now not after some crisis occurs. The potential for human or animal disaster is too real to ignore.

Recommendation - The Veterinary Biologics funding should be set at a minimum of $9 million for FY-87.

### Brucellosis Program

The brucellosis eradication program must be vigorously pursued. This is important from views of human disease, from animal disease, for economical meat, for increased export of meat and animals, and critically for the maintencance of an adequate vanguard of Veterinary Services personnel.

Outbreaks of highly pathogenic diseases today could be disastrous to our health, wealth and defense. Our country's defense system would be in jeopordy since an army still "travels on its stomach." If foot and mouth (or any others) were introduced in peacetime--immediately all U.S. meat would be prohibited by most of the countries in which we have bases overseas. If it were introduced during mobilization the greatly decreased food production and other complications could be disastrous.

Whether these highly virulent diseases originate in this country (such as the recent avian influenza outbreak) or whether they are exotic and come from overseas (such as foot and mouth disease) is irrelevant. We still need a minimum number of highly qualified Veterinary Services personnel always available to react immediately. We cannot afford the ideal peak buildup number of personnel that will be required to finally control a massive epizootic but we cannot afford to go below the minimum needed for constant vigilance and for immediate onslaught reaction to the potential disease invasion. This minimum number in our opinion cannot be sustained with less than FY-85 Veterinary Services funding for brucellosis since this budget item contains a major amount of their man-years. This required minimum personnel resource is really the overriding issue that must be considered in their budget.

During lulls in epidemics these resources have many other critical disease control objectives which are both health and wealth cost effective. One is brucellosis eradication.

We strongly recommend that the continued goal be to eradicate brucellosis and tuberculosis among other diseases. Such has already been done in eight other major importing countries. Brucellosis is eradicatable just as was hog cholera.

History documents no instance where less than federal entities have coordinated and effectively controlled ANY multistate disease entity. Major federal leadership, technical services, personnel and money have always been required both here and in other countries. Scabies is an example of spread from only Texas in 1970 to ten times that now. States also have a history of taking retaliatory actions even on unrelated products. Allowing control of any national disease to become primarily state or industry managed would be the same as abolishing the program.

The states and the industry are presently carrying a very substantial load (over $70 million reported). This does not count the individual owners' share in testing, vaccination, handling, disease loss, etc. The greatly increased costs they would have to absorb would in essence go toward putting out small fires while the burning forest around them shot sparks everywhere.

Each administration, each Congress and each individual at one time or another have said that prevention is cheaper--prevention is best. Usually, however, funding for preventive measures dramatically falls short.

We must continue to provide all the services that only the federal government is able to do. We must protect and improve the public's health, our food producing animals' health and our internal and external export economy. To do these we must have a program funded adequately to: 1) prevent entry of disease at ports; 2) survey and detect indigenous and exotic diseases; 3) maintain state-of-the-art technical and laboratory services; and 4) respond quickly to disease outbreaks of national importance.

Recommendation - NAFV therefore requests that the Veterinary Services budget of APHIS be funded at the 1985, $73 million level for brucellosis. The safest and most efficient food animal production system on earth can afford no less.

Mr. Chairman, members of the Committee, thank you for allowing the National Association of Federal Veterinarians to present its views. I will now attempt to answer any questions you may have.

## SUBCOMMITTEE RECESS

Senator MATTINGLY. This concludes today's hearing. This subcommittee will hold its next hearing tomorrow, Wednesday, May 7, beginning at 2 p.m., in this same room. Until that time, the subcommittee will stand in recess.

[Whereupon, at 4:04 p.m., Tuesday, May 6, the subcommittee hearing was recessed, to reconvene at 2 p.m., Wednesday, May 7.]

# AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1987

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WEDNESDAY, MAY 7, 1986

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.*

The subcommittee met at 2:05 p.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Burdick, Mattingly, Andrews, Specter, Cochran, and Sasser.

Also present: Senator Gore.

## NONDEPARTMENTAL WITNESSES

### SUBCOMMITTEE PROCEDURE

Senator BURDICK [presiding]. The subcommittee will come to order. This afternoon we begin the third of four hearing sessions to receive testimony from Members of Congress and nongovernmental witnesses who want to express their views and opinions with respect to programs which come under the jurisdiction of this subcommittee.

We have some 14 or 15 organizations scheduled to testify this afternoon, and it is for this reason that we ask you to limit your oral comments to 5 minutes. We have your written statements, and they will be included in the record in full. We hope you will summarize your statements so that everyone will have an opportunity to be heard.

I should also point out that the subcommittee cannot receive any copyrighted material unless arrangements have been made in advance by the witness to obtain permission of the copyright owners of those materials. This notice is being given to protect the copyright owners as well as the subcommittee and the witnesses.

### NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

### STATEMENT OF DWIGHT WELCH

We welcome Mr. Dwight Welch, our leadoff witness this afternoon, representing the National Telephone Cooperative Association.

You may proceed, Mr. Welch.

Mr. WELCH. Thank you. Mr. Chairman, members of the subcommittee, good afternoon. My name is Dwight Welch, and I am manager of Hardy Telephone Co., Inc., Lost River, WV. Today I also represent the National Telephone Cooperative Association [NTCA]. NTCA is a national trade association representing over 450 small rural telephone systems in more than 40 States.

Hardy Telephone Co. serves over 1,600 subscribers in rural north-central West Virginia. It was established in the mid-1950's because the telephone company serving the towns in the area refused to serve the rural countryside. The REA program made it possible for a group of citizens in Hardy County to form a corporation and borrow REA money to provide phone service to these areas.

I want to thank this subcommittee for its strong support for the REA program in the past. REA has made it possible for areas like ours to have telephone service in the first place. Without REA, we would not be able to complete important projects such as converting our old step-by-step switches, some dating back to 1959, to modern digital switches, which we hope to do with our new loan.

In our part of the world, we know what REA does, and we are grateful to you who make it possible.

As a representative of my cooperative and a member of NTCA, I cannot support the President's fiscal year 1987 proposals for the Rural Electrification Administration. I urge the subcommittee to reject these unfair proposals. The large cuts in fiscal year 1987, the phaseout by 1990, the new fees, and the sale of assets would add to growing problems with rural telephony and could make rural telephone service unaffordable.

The benefits of the REA program accrue to rural consumers, not to telephone systems. The economy in our area—plagued by consistent unemployment and farm problems, and last November's flood—is in trouble. This is no time to place higher costs on our rural farm families.

REA representatives recently testified that REA telephone borrowers have done so well in the past that they will not need the REA loan program in the future. I wish that were true.

When you compare total operating revenues of the REA borrowers with those of the large non-Bell local telephone companies, you see that we have not been able to keep up with the others. REA borrowers' total operating revenues increased by 66 percent from 1980 to 1984. Large independents' total operating revenues increased by 288 percent.

Furthermore, the future looks quite different from the past for rural companies. The Federal Communications Commission and State regulators are dramatically changing the existing regulatory framework, which will reduce the support that long-distance service provides to the local telephone company. REA borrowers, on average, rely on long-distance service for 66 percent of their total operating revenues. Many will be significantly affected by these regulatory changes.

REA representatives also claimed that REA borrowers have become increasingly urbanized. REA borrowers serve an average of 3.8 customers per square mile, compared with 49.86 for all telephone companies and 128.57 for the former Bell System. My company's density is 4.5 per square mile, this is a low density by anyone's standards.

REA witnesses claimed that REA cannot target its loan funds. This is misleading, since Congress requires REA to give first preference to the use of higher interest Rural Telephone Bank moneys when it makes loans to systems with more than three customers per mile.

As a result, more than one-half of REA telephone borrowers have obtained some or all of their loans from the bank. We disagree with the contention that REA is no longer needed and that the borrowers can afford alternative financing. Borrower net worth at 28.5 percent is still far below the level that the private financing market seeks in telephone companies. Moreover, most of us could not afford the higher cost of those sources without significant rate increases.

## CONTROVERSIAL REA POLICIES

I would now like to comment on two REA policies about which this subcommittee has shown concern during the past year. One concerns the Engineering and Standards Division of REA. Despite strong report language accompanying the appropriations bill, REA has not yet filled the vacant positions in this division. As you know, it is estimated that the division saved $133 million during the rural telephone electric construction budgets. Three additional engineers have left the division, and REA has taken no steps to replace most of the staff.

We hope that the subcommittee will maintain its interest in this issue, as we believe that the added pressure from Congress gets the best results possible from the administration.

Finally, the elimination of the unfair general funds policy has made it possible for many telephone companies to proceed with much needed but delayed projects. REA reports an increase in loan applications, which it ascribes to the general fund policy change. We believe that the subcommittee action in asserting congressional authority in the area has had a very positive effect on the program and its borrowers. We urge the subcommittee to extend its prohibition through fiscal year 1987.

Once again, thank you for your interest and support of rural telephone systems and the REA programs. Changes in our industry and problems in the rural economy make REA more important than ever. Your work on this and other rural programs has improved the quality of life immeasurably in America's small towns and farms. I appreciate this opportunity to speak before you, and I look forward to your questions. Thank you.

Senator BURDICK. We've heard some testimony here at these hearings that the REA's are doing quite well; they're profitable. What do you have to say to that?

Mr. WELCH. Well, I can certainly tell you some figures in Hardy Telephone Co., as far as profitability is concerned. Hardy Telephone Co. lost money 12 years in a row. We have a net worth that is below zero.

Another point that I would like to make is that on the intrastate side of our revenue portion—these are revenues which are generated within the State—there are proposals before the West Virginia Public Service

Commisssion that would reduce our intrastate revenue by 60 percent. We have to contend with that, and I realize that the intrastate revenues have been making the headlines for the last 2 years, and I won't go into what has been happening in that arena.

Senator BURDICK. Mr. Welch, could you elaborate on the effect that the deregulation of the telephone industry is having on rural telephone programs?

Mr. WELCH. Well, it has certainly had the effect of increasing our expenses. I, as the manager of a small telephone company with nine employees, find myself spending full-time efforts in going to State hearings and negotiating with the larger companies that we must deal with for our toll settlements. It has forced me to look for additional staff. We are consistently, by all jurisdictions, being affected by efforts to reduce our revenues.

At this point in time, when our revenue sources are being pulled out from under us, the divestiture has increased our expenses, and now the President's budget wants to pull the only place that financing is available to us for much needed improvements and extensions to new rural customers. It's a very poor time to do that to us.

Senator BURDICK. Thank you very much..

Mr. WELCH. Thank you, sir.

[The statement of Mr. Welch follows:]

## STATEMENT OF DWIGHT WELCH

Mr. Chairman, Members of the Committee, good afternoon. My name is Dwight Welch and I am Manager of the Hardy Telephone Company, Inc.. Today, I also represent the National Telephone Cooperative Association (NTCA). NTCA is a national trade association representing more than 450 small and rural telephone systems in over 40 states. I appreciate the opportunity to testify before you today concerning an issue of great importance to the NTCA membership and to the rural consumers they serve, the Rural Electrification Administration (REA).

Hardy Telephone Company serves over 1600 subscribers in rural north central West Virginia. It was established in the mid-1950's. At that time, there was telephone service in the centers of the small towns of Moorefield and Wardensville. The company serving the towns refused to extend service to the surrounding rural area. When the REA telephone program was established, the citizens of Hardy County started a cooperative to obtain an REA loan to provide telephone service.

I thank the Subcommittee for its strong support of REA and the Rural Telephone Bank (RTB). Without your work, it is doubtful that the program could have remained in existence. The nation would be in the same situation as it was in 1949, when only 38% of America's farms and rural homes had telephone service. We would not have a telephone network that stretches uninterrupted from one coast to the other. For this, rural America and consumers of American farm products everywhere owe a debt of gratitude.

### A CHANGING INDUSTRY

Universal telephone service has been a long standing national goal. Significant progress was made in achieving this goal in a regulatory system which, in the past, required long-distance service to contribute to the support of local facilities it used. According to the 1983 American Housing Survey of the U. S. Department of the Census, only 10% of households in rural America do not have access to a telephone.

However, as this subcommittee is aware, the regulatory system that fostered our universal service has been dramatically altered. It is being replaced with a system in which long distance rates are decreasing and local customers are bearing a greater burden of the expense of building the facilities shared by local and long-distance service. This will be a significant change for REA borrowers who rely on long-distance service for an average of 66% of their total operating revenues.

The most obvious change in this new regulatory environment was the imposition of a $1 per month access charge in 1985, a charge which will double this year. The Federal Communications Commission (FCC) will re-examine the access charge issue this June and may opt to further increase access charges. There are also other significant but less obvious increases in local rates which we expect due to deregulation. State regulators are also considering changes in the way local and long-distance costs are paid, and are shifting more of the costs to local subscribers. The encouragement of local competition to provide telephone-type services to the profitable, large-volume customers also places a greater burden on the average residential user.

These changes are taking place in the context of an economically depressed rural economy. Many NTCA members report drop-off of rural customers due to the hardship now experienced by American farmers. One Missouri system reports losing 113 of its subscribers in the last three months. Telephone deregulation and the shifting of cost to the local subscriber could not have occurred at a worse time for rural America.

## ADMINISTRATION PROPOSES TO ELIMINATE THE PROGRAM

Proposals to eliminate the Rural Electrification Administration (REA) program are also untimely. As you know, the Administration has proposed the following for the REA telephone program in FY 1987:

- Reduce REA insured loans by 82% and RTB loans by 37%;
- Phase-out of REA and RTB lending by FY 1990;
- Increase interest rates to the Treasury borrowing rate plus one and one-eighth percent;
- Eliminate the REA telephone loan guarantee program and RTB capitalization;
- Impose a 5% loan origination fee and a fee to cover defaults; and
- Sell assets of the REA Revolving Fund and the Rural Telephone Bank (RTB).

NTCA urges the subcommittee to reject these proposals. The increase in interest rates is unnecessary at the present time, since REA is already empowered to require higher density borrowers that can afford to do so to borrow from the RTB at higher rates. The RTB is currently lending at 8% - about the same interest rate the Bank for Cooperatives will lend to telcos.

We oppose the loan origination fee because it will significantly increase the cost of borrowing from REA. Some of our members estimate that the paperwork and time delays experienced with REA loans already adds 1-2 percentage points to interest on the loans. The fee to cover defaults is inappropriate -- the telephone program has not had a single default since its inception in 1949 and there is no indication that there will be one in the future. The sale of the loan assets of the RTB and the Revolving Fund will weaken both the Bank and the Fund, and adversely affect the ability of the Bank to obtain money from the Treasury. We also question the appropriateness of selling government assets at 50% of value.

Cutting off REA financing at a time when local subscribers are already facing higher rates due to deregulation could be harmful to universal telephone service. The benefits of the REA program accrue to the consumers and not to the telephone system. Eliminating this source of affordable financing could result in telephone service in rural areas which is inferior to that in urban areas.

## REA TESTIMONY

In recent testimony before this subcommittee, REA representatives stated that telephone borrowers have prospered during the past four years. They concluded that this past prosperity indicates that REA funding will not be needed in the future.

The data used to support this claim is subject to question, however. First, it is not clear that the borrower group that was compared (the borrowers in 1981 and 1984) is comprised of the same companies. Mergers among REA borrowers and the entry of new borrowers would affect the comparability of the 1981 and 1984 data. (Last year, REA had applications from 19 first-time borrowers. This year, REA has applications from 12 new borrowers.) The figure for net income or margin as a percent of total revenue is not consistent with the information in REA's own 1984 Statistical Report, Rural Telephone Borrowers (REA Bulletin Number 300-4), which states that net income or margins represents 13 cents out of every dollar of revenues. This is only a one cent increase over the comparable 1980 figure. By comparison, taxes and general office salaries and other expenses increased by the same amount over the same period.

Compared to the larger independent telephone companies, REA borrowers have not prospered as much as REA staff suggest. From 1980-1984, REA borrowers experienced a growth in total operating revenues of 66%. Larger independent telcos experienced a growth in total operating revenues of 288% during the same period. Similarly, REA borrowers have an average ratio of net worth to total assets of 28.5%. To get an idea of the contrast, compare this with the debt-equity ratio of 42% for the Regional Bell Operating Companies.

Moreover, it is questionable whether REA borrowers will continue to prosper during the coming years. As discussed earlier, there are several major policy shifts which could reverse or diminish historical revenue and net income growth trends. The phase-out of settlements among states, competition for service to selected customers and the shift in allocation and recovery fixed plant costs could provide less revenue for local telephone companies.

The Administration also claims that REA borrowers are servicing urban areas. This is not true of telephone borrowers, according to REA's own statistics. The 1984 Statistical Report (REA's most recent statistical publication) states that the average REA telephone borrower has a density of only 5.5 customers per mile of telephone line. Hardy has only 2.09 customers per route mile. That is low by anyone's estimate. Another comparison is the number of customers per square mile. The Bell Companies, according to a 1982 study by the National Telecommunications and Information Administration, have a density of 128.57 phones per square mile. The weighted average for all telephone companies is 49.86 phones per square mile. REA borrowers on the other hand, in 1984 had an average density of 3.8 subscribers per square mile.

NTCA disagrees with the statement that the elimination of REA and the RTB will not jeopardize the economic health of REA telephone borrowers. Reasonably priced financing is needed to: provide affordable telephone service to areas that remain unserved; upgrade to single-party service the 11.5% of subscribers who have party-line service; replace obsolete aerial cable and worn out buried cable and replace outmoded "step" switching equipment, with digital switches which are capable of providing equal access and custom calling features.

Most REA borrowers do not qualify for commercial loans to finance these projects. Commercial banks usually require borrowers to have debt-to-equity ratios over 40%, considerably higher than that of most REA borrowers.

REA representatives also state that they are prevented from targeting loans to borrowers based on need. As proof, they point to Congressional action to prohibit REA from implementing its general funds policy. We do not agree with REA's interpretation of this policy. The general funds policy used investments in affiliated companies, RTB stock purchases required by the Rural Electrification Act, and other telco assets to deny REA loans and loan advances to 77% of eligible telephone borrowers. REA used a threshold level of 8% of total telephone plant to deny such loans. Since elimination of the general funds limits, there has been a marked increase in utilization of the telephone program. This increase has not, however, reached the "tidal wave" proportions earlier predicted by REA staff. Elimination of the general funds criterion has removed a significant obstacle to obtaining REA loans for needed telecommunications projects. NTCA asks for the continuation of the prohibition during FY 1987.

REA does tailor its loans to a telephone borrowers' financial condition through use of the RTB. REA is required to give first priority to use of RTB monies for borrowers which have more than 3 subscribers per mile of line and can meet a 1.5 Times-Interest-Earned-Ratio test. RTB loans are made at an interest rate which reflects the Bank's cost of money and are blended with insured (5%) loans. The RTB was conceived as a "credit ladder" which moves telephone systems to higher-interest loans as they grow financially stronger.

## ENGINEERING AND STANDARDS DIVISION

Finally, we would like to bring to the subcommittee's attention the continuing problems with the REA Engineering and Standards Division. NTCA appreciated last year's report language stating that the vacancies should be filled. In the past year, however, three additional professionals from the Telephone Engineering and Standards Division have left, making a total of eight vacancies since 1984. This represents about one-third of the Division. Clearly, such a significant loss of personnel compromises the Division's effectiveness. To make matters more confusing, the Division was reorganized and asked to take on the duties of another division. Only six additional people will be added on the already depleted professional staff to shoulder this new burden.

The Power and Communication Contractors Association has estimated that REA's standardized contracts and specifications saved $133 million on rural telephone and electric construction projects in one year. To lose these cost efficiencies by draining the REA Engineering and Standards Division will increasee the cost of REA-financed construction and require use of more loan funds, resulting in higher interest costs for both the government and the borrowers and higher subscriber telephone bills.

We request that the subcommittee continue to emphasize the importance of maintaining a strong engineering and standards function at REA.

In closing, NTCA appreciates this subcommittee's past support for REA and the RTB and urges you to continue your fine work on behalf of rural America.

Thank you.

## NATIONAL RURAL TELECOM ASSOCIATION

### STATEMENT OF JOHN O'NEAL, GENERAL COUNSEL

Senator BURDICK. Our next witness will be Mr. John O'Neal, general counsel of the National Rural Telecom Association.

Welcome to the committee, Mr. O'Neal.

Mr. O'NEAL. Mr. Chairman, I will summarize my statement, my written statement. I am John F. O'Neal, general counsel of the National Rural Telecom Association. Our association is comprised of commercial telephone companies who borrow their capital needs from the Rural Electrification Administration to extend and modernize telephone service in rural areas. Approximately 1,034 or 71 percent, of the Nation's telephone companies borrow from REA. They serve almost 5 million subscribers in 46 States. In accepting these loan funds, borrowers assume an obligation under the act to serve the widest practicable number of rural users within their service territory.

Mr. Chairman, continuation of a strong REA program is very important to rural America. It is imperative that this vital program not be jeopardized by philosophical opposition or by unrealistic assessments of program needs.

This committee and the Congress as a whole have strongly supported the REA telephone program since its inception in 1949. We appreciate your past efforts and look forward to an even stronger REA program for the future.

Because of ongoing budget constraints, our association is recommending again this year that loan levels be frozen at last year's levels. As in the past, we want to reiterate our willingness to accept reductions in program levels if the committee believes that is necessary to achieve its overall budget objectives.

However, we believe that reductions in the REA program should generally be proportionate to reductions in other Federal programs and not be designed merely to accomplish ideological or philosophical goals, as has been suggested by the administration.

Proposals contained in the President's budget again this year would severely curtail and ultimately phase out the REA program. Mr. Chairman, there still have been no studies conducted which would support such radical proposals. No one knows for certain what the full impact or effects would be. But one thing is certain: Rural telephone rates would increase and service levels would deteriorate.

Included in my written statement is a list of telephone loan applications by State which are currently on hand at REA. As of April 1, 1986, exactly halfway through this fiscal year, there was over $438 million in pending loan applications. Thirteen of these applications are from companies who have never borrowed from REA before. Critics of REA argue that the need for the program is over because borrowers have the ability to borrow from private sources. However, private market lenders normally require 40 to 60 percent equities before they will extend credit. Based upon the latest available REA statistics, the average telephone borrower at the end of 1984 had a net equity of only 28.5 percent.

Also, it is important to note that most REA borrowers in relation to other telephone companies are very small, and the territory they serve is extremely large, but sparse. They serve over 1 million square miles, or 34.5 percent, of the territory, but less than 5 percent of the telephones. REA borrower density is less than four access lines per square mile. The Bell System's is over 80.

Again, this year the President's budget contains no request for funding for the Rural Telephone Bank. The purpose of the RTB is to provide a supplemental source of financing for REA telephone borrowers who can afford to pay higher rates of interest, thus relieving pressure on the insured loan program. The bank is required, under its enabling legislation, to lend at its cost of money. Currently, that rate has been set for the third quarter at 8 percent.

Each annual increment of capital is vital to the full capitalization of the bank, enabling more and more insured program borrowers to utilize bank financing. Therefore, we respectfully request that the committee continue the appropriation of $30 million next year for Government purchase of class A stock in the Rural Telephone Bank.

### STABILITY OF REA AND ITS BORROWERS

Mr. Chairman, again this year the REA program is facing great challenge. However, it withstands these annual assaults because it is a sound Federal program that is tried and tested, and it works. It is needed today more than ever before. Rapid technological change and policies of competition and deregulation in the telephone industry underscore the need for targeted assistance to rural areas. Rate pressures in rural areas are already burdensome, with predictions that some rates will double or even triple in the foreseeable future. Without the credit assistance provided by REA, even greater pressure would exist for rate increases.

In addition, many fail to recognize that without the REA program, the quality of telephone service in rural areas also would deteriorate. That is certain because the REA Act imposes a higher standard of service on borrowers than would otherwise be required. The REA Act requires that telephone service be provided to the widest practicable number of rural users in each borrower service area, a mandate that REA strictly enforces.

For the second straight year, REA last year failed to meet the minimum telephone loan levels established by this committee and the Congress, even though there was a substantial backlog of applications at the agency—over $370 million at the end of the fiscal year. However, because of the initiative of this committee and the action of Congress last year in prohibitiing REA from relying on general funds restrictions to exclude or reduce borrower participation in the program, that situation will likely not be repeated this year. From all indications, REA is adhering not only to the letter, but also to the spirit of Congress' directives in this regard. Loan funds now are being disbursed routinely, and the program is again functioning as intended by Congress.

We urge the committee to extend the general funds prohibition in the fiscal year 1987 bill. Otherwise, the effective operation of the REA telephone program will once again be seriously jeopardized.

Thank you very much for the opportunity to present our views concerning this vital program. We will be happy to answer any questions you may have.

Senator BURDICK. Thank you very much.

[The statement of Mr. O'Neal follows:]

## STATEMENT OF JOHN F. O'NEAL

### SUMMARY OF TESTIMONY REQUESTS

Project Involved: Telephone loan programs administered by the Rural Electrification Administration

Actions Proposed:

1. A freeze on loan levels for the insured, guaranteed and Rural Telephone Bank lending programs in the ranges authorized for FY 1986.
2. An appropriation of 30 million dollars for the purchase of Class A stock by the government in the Rural Telephone Bank, representing the capital increment for FY 1987.
3. Inclusion of the same provision as in the FY 1986 Act prohibiting the denial or reduction of loans or loan advances based upon a borrower's level of general funds.

Mr. Chairman, Members of the Committee:

My name is John F. O'Neal. I am General Counsel of the National Rural Telecom Association. Our association is comprised of commercial telephone companies who borrow their capital needs from the Rural Electrification Administration to extend and modernize telephone service in rural areas. Approximately 1,034 or 71% of the nation's telephone companies borrow from REA. They serve almost 5 million subscribers in 46 states. In accepting these loan funds, borrowers assume an obligation under the Act to serve the widest practical number of rural users within the service area.

Mr. Chairman, continuation of a strong REA program is very important to rural America. It is imperative that this vital program not be jeopardized by philosophical opposition or by unrealistic assessments of program needs. This Committee and the Congress as a whole has strongly supported the REA telephone program since its inception in 1949. We appreciate your past efforts and look forward to an even stronger REA program for the future.

### Ongoing Need for the REA Telephone Loan Programs

Because of ongoing budget constraints, our association is recommending again this year that loan levels be frozen at last year's levels. These are the ranges your Committee approved for FY 1986:

| | |
|---|---|
| REA Insured Loans | $250-325 million |
| REA Loan Guarantees | $185-220 million |
| Rural Telephone Bank Loans | $125-145 million |

As in the past, we want to reiterate our willingness to accept reductions in program levels if the Committee believes that is necessary to achieve its overall budget objectives. However, we believe that reductions in the REA program should be generally proportionate to reductions in other federal programs and not designed merely to accomplish ideological or philosophical purposes as has been suggested by the Administration.

## Administration's FY 1987 Proposals

Proposals contained in the President's budget again this year would severely curtail and ultimately phase out the REA program. For FY 1987, insured loan levels would be reduced to $60 million. No loans funds are requested under the guaranteed loan program despite the fact that such loans are made at more than the government's full cost of money and result in a profit for the government. Also, interest rates under all programs would be increased to the government's cost of money plus one and one-eighth percent resulting in a dramatic increase in the insured program. And finally, all REA lending programs would be phased out by FY 1990. If adopted, these proposals would result in a complete devastation of the REA program. Mr. Chairman, there still have been no studies conducted which would support such radical proposals. No one knows for certain what the full impact or effects would be. But, one thing is certain: rural telephone rates would increase further and service levels would surely deteriorate.

Below is a list of telephone loan applications by state currently on hand at REA. As of April 1, 1986, exactly half way through this fiscal year, there was over $438 million in pending loan applications. 13 of these are from companies which have never borrowed from REA before. I know the Committee will agree that these figures, furnished by REA, amply demonstrate the ongoing need for this important program.

TELEPHONE LOAN APPLICATIONS ON HAND AT REA
(4-1-86)

| State/ Territory | No. of Apps. | $ Amount of Applications | No. Comp. | $ Amount of Compl. Apps. | No. of Un-com. Apps. | $ Amt. of Uncom. Apps. |
|---|---|---|---|---|---|---|
| Alabama | 4 | 11,600,000 | 1 | 3,600,000 | 3 | 8,000,000 |
| Alaska | 3 | 5,200,581 | - | --- | 3 | 5,200,581 |
| Arizona | 1 | 1,311,000 | - | --- | 1 | 1,311,000 |
| Arkansas | 5 | 11,269,000 | 3 | 7,269,000 | 2 | 4,000,000 |
| Georgia | 1 | 15,303,000 | 1 | 15,303,000 | - | --- |
| Indiana | 4 | 8,000,000 | 2 | 5,000,000 | 2 | 3,000,000 |
| Iowa | 14 | 8,820,500 | 1 | 582,000 | 13 | 8,238,500 |
| Kansas | 3 | 11,386,000 | 1 | 3,086,000 | 2 | 8,300,000 |
| Kentucky | 1 | 3,200,000 | 1 | 3,200,000 | - | --- |
| Louisiana | 2 | 4,926,000 | - | --- | 2 | 4,926,000 |
| Maine | 1 | 1,000,000 | - | --- | 1 | 1,000,000 |
| Michigan | 4 | 35,621,600 | 1 | 1,230,000 | 3 | 34,391,600 |
| Minnesota | 9 | 21,430,000 | 2 | 5,919,000 | 7 | 15,511,000 |
| Mississippi | 4 | 10,000,000 | 1 | 3,500,000 | 3 | 6,500,000 |
| Missouri | 3 | 6,203,000 | 1 | 103,000 | 2 | 6,100,000 |
| Montana | 1 | 6,250,000 | - | --- | 1 | 6,250,000 |
| Nebraska | 8 | 18,080,000 | 1 | 3,200,000 | 7 | 14,880,000 |
| Nevada | 1 | 20,000,000 | - | --- | 1 | 20,000,000 |
| New Hampshire | 1 | 500,000 | 1 | 500,000 | - | --- |
| New Mexico | 3 | 5,000,000 | 1 | 2,000,000 | 2 | 3,000,000 |
| New York | 5 | 8,872,400 | 3 | 5,622,400 | 2 | 3,250,000 |
| North Carolina | 6 | 42,487,005 | 1 | 4,000,000 | 5 | 38,487,005 |
| North Dakota | 2 | 7,500,000 | - | --- | 2 | 7,500,000 |
| Ohio | 3 | 3,100,000 | 1 | 1,600,000 | 2 | 1,500,000 |
| Oklahoma | 4 | 8,742,000 | 3 | 4,742,000 | 1 | 4,000,000 |
| Oregon | 4 | 11,503,000 | 4 | 11,503,000 | - | --- |
| South Dakota | 5 | 10,367,000 | 1 | 3,819,000 | 4 | 6,548,000 |
| Tennessee | 5 | 42,064,000 | 2 | 29,064,000 | 3 | 13,000,000 |
| Texas | 16 | 74,814,700 | 4 | 10,149,000 | 12 | 64,665,700 |
| Utah | 2 | 3,046,000 | 1 | 1,583,000 | 1 | 1,463,000 |
| Washington | 1 | 439,950 | 1 | 439,950 | - | --- |
| West Virginia | 1 | 1,152,000 | 1 | 1,152,000 | - | --- |
| Wisconsin | 2 | 2,020,000 | - | --- | 2 | 2,020,000 |
| Pacific Islands | 3 | 17,650,000 | - | --- | 3 | 17,650,000 |
| TOTALS | 132 | 438,858,736 | 40 | 128,166,350 | 92 | 310,692,386 |

### Lack of Availability of Private Credit

Critics of REA argue that the need for the program is over because borrowers have the ability to borrow from private sources. But let us examine that. Private market lenders normally require 40 to 60 percent equities before they will extend credit. Based upon the latest available REA statistics, the average telephone borrower at the end of 1984 had a net equity of 28.5 percent. Private lenders also require a one and one-half times interest coverage ratio test and prefer a ratio of 2 or higher. Most borrowers cannot meet the minimum test much less the preferred one. Also it is important to note that most REA borrowers in relation to other telephone companies are very small and the territory they serve is extremely sparse. They serve 1,248,025 square miles or 34.5% of the territory but less than 5% of the telephones. REA borrower density is about 4 access lines per square mile. The Bell system's is over 80.

### Rural Telephone Bank

In 1981, Congress authorized the additional government purchase of $300 million of Class A stock from the Rural Telephone Bank in the amount of $30 million per year for 10 years. Again this year, the President's budget contains no request for this funding. In addition, they are again seeking recision of last year's capitalization provided by the Congress.

Congress originally established the Rural Telephone Bank in 1971. Its purpose is to provide a supplemental source of financing for REA telephone borrowers who can afford to pay higher rates of interest, thus relieving the pressure on the insured loan pogram. The bank is required under its enabling legislation to lend at its cost of money.

It has proved to be a highly successful institution. Each annual increment of capital is vital to the full capitalization of the Bank, enabling more and more insured program borrowers to utilize bank financing fulfilling Congress' objectives. This Committee and the Congress as a whole has recognized the essential nature of this ongoing additional capitalization process by providing full funding for each of the first five fiscal years, 1982-1986.

The purpose for government purchase of Class A stock in the Bank is to attain a lending rate somewhere between the insured lending rate and the full cost of money rate. The infusion of the $30 million per year into the Bank permits the Bank effectively to achieve this rate, enabling more borrowers to be weaned away from the five percent statutory insured rate. The bank rate currently is 8.5 percent.

The Rural Telephone Bank is the cornerstone of financing for REA telephone borrowers for the future and hopefully, will be the institution which will ultimately provide all of the debt capital needs for rural telephone systems. Fullfillment of the Bank's capital structure is a vital factor in this process. Therefore, we respectfully request that the Committee continue the appropriation of $30 million next year for government purchase of Class A stock in the Rural Telephone Bank.

### Conclusion

Mr. Chairman, the REA program continues to face its greatest challenges. However, it withstands these annual assaults because it is a sound federal program that has been tested and works. And, it is needed today more than ever before. Rapid technological change and policies of competition and deregulation in the telephone industry underscore the need for targeted assistance to rural areas. Rate pressures in rural areas are already burdensome with predications that some rates will double or even triple in the foreseeable future.

Without the credit assistance provided by REA, even greater pressure would exist for rate increases.

Also, many fail to recognize that without the REA program the quality of telephone service in rural areas would also deteriorate. That is certain because the REA Act imposes a higher standard of service on borrowers than would otherwise be required. In the old days, if carriers provided service at all in rural areas it was only down the roads because service on any other basis was not feasible. Today, thanks to the Congress and the REA legislation, telephone service is provided to the "widest practicable number of rural users" in each borrower's service area -- a mandate that REA strictly enforces.

For the second straight year, REA last year has failed to meet the minimum telephone loan levels established by this Committee and the Congress even though there was a substantial backlog of completed applications at the agency -- over $370 million at the end of the fiscal year. However, because of the initiative of this Committee and the action of Congress last year in prohibiting REA from relying on general funds restrictions to exclude borrowers from the program (up to 77%) that situation will likely not be repeated this year. From all indications, REA is adhering not only to the letter but also to the spirit of Congress' directives in this regard. Loan funds are being disbursed now routinely and the program is again functioning as intended by Congress. We hope and recommend that the Committee extend the general funds prohibition in the FY 1987 bill. Otherwise, the effective operation of the REA telephone program will once again be jeopardized.

Thank you again for the opportunity to present our views concerning this vital program which is as worthy and necessary today as it was when enacted in 1949.

## UNITED STATES TELEPHONE ASSOCIATION

### STATEMENT OF BENNET R. MILLER

Senator BURDICK. Our next witness will be Mr. Bennet R. Miller, member of the United States Telephone Association.

Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman, members of the subcommittee. My name is Bennet R. Miller, often referred to by my friends as just simply "Ben Miller." I am president of Tri-County Telephone Co. of New Richmond, IN. I am appearing before you as a representative of the United States Telephone Association, of which, if all things hold together, I will serve as chairman next year.

USTA represents over 1,100 member systems, including the Bell Companies; and I might add that of those 1,100 companies, over 800 of them are REA borrowers.

My company, Tri-County, serves approximately 2,500 subscribers, with an average of about 4.5 subscribers per mile of line, and we are an REA borrower. As Tri-County's president, I am personally dedicated to serving the needs of the rural subscriber, contributing to Indiana's telecommunications requirements, and maintaining universal service.

USTA members large and small firmly believe that to maintain a healthy rural telephone industry which provides universal service, the targeted assistance offered by a strong Rural Electrification Administration is vital.

The USTA has six major recommendations for the REA telephone program. The first recommendation is to strongly support the continuation of a strong REA program and universal service. The second recommendation is a freeze of fiscal year 1986 lending levels. This would mean $250 million for the insured program, $180 million for the Rural Telephone Bank, and $125 million for the loan guarantee program. Our third recommendation is for a $30 million capitalization in fiscal year 1987 for the Rural Telephone Bank and no rescission of the $30 million capitalization in fiscal year 1986 for the Rural Telephone Bank. Our fourth recommendation is the continuation of the current range of interest rates. Our fifth recommendation is the freezing of the REA administrative budget at the 1986 levels. And the sixth and final recommendation calls for congressional direction to require REA to continue a recent requirement of minimal regulations of general funds.

We understand that the Gramm-Rudman Act mandates proportionate reductions in program levels to achieve overall budget objectives. However, the administration's fiscal year 1987 proposals are nothing of the sort. They are a clear attempt to phase out the REA program entirely, contrary to last year's 3-year budget agreement.

Telephony is a capital-intensive industry. In rural areas we generally have higher costs and need relatively greater sums of capital to maintain universal service. For example, over 80 percent of REA's borrowers' switching offices still have the mechanical step-by-step technology. To provide rural companies with the telephone switching technology that is needed in today's environment and to stay abreast of the information age, new switching offices will be needed, at a cost of over $150 million per year for the next 10 years.

In the last 15 years REA borrowers have upgraded to mostly one-party service through investment in telephone cable, which lasts for about 15 years. Potential replacement cost of this plant is over $200 million per year. Given the need to update switches and to begin replacing outside plant, the USTA-recommended lending levels for REA are essential for universal service.

### NEED FOR REA CONTINUES

Contrary to what some are saying, the job in rural America is not done. The REA telephone program has a range of interest rates which reflect careful targeting of Federal expenditures. The recent drop in interest rates has decreased the cost of the REA program by reducing the gap between REA's cost of borrowing and its lending rates. REA lending rates are nearer the market, but their level and availability remain the key to whether rural customers having telephone systems providing telephone service on an area coverage basis at reasonable rates.

The administration's proposed fiscal year 1987 budget raises the interest rates on all REA loans to market rates plus 1⅛ percent. In addition, loan origination fees would be assessed. These conditions would be counterproductive to the intent of the REA program and would deny many small telephone companies and their customers the means needed to compete in our present economic environment.

The REA telephone loan program does not contribute to the deficit. The chart to my right compares the amount of money paid to the Federal Government by the REA telephone borrowers to the cost to the Government of maintaining the REA. As you can see, the telephone program produces a net gain of over $10 million. Over $1 billion in principal payments already have been repaid to REA.

There has never been a default in the history of the REA telephone program. All taxpayers can be proud of this record. This is not a giveaway program. It's not a grant. It's not an entitlement program. But it is a loan to be paid back and is being paid back with principal and interest. I feel that if all Government programs were of this type, we wouldn't be sitting here today talking about a deficit.

Telephone service in rural areas is an essential part of the rural infrastructure that keeps American agriculture productive. This period of crisis in American agriculture is not the time to reduce the investment in rural areas. Employees of REA borrower companies and the investment in the REA rural areas contribute significantly to the farm economy and to Federal tax revenues. REA telephone remains a rural program. The subscription density of the average REA telephone borrower is virtually the same as 10 years ago. In 1984, REA telephone borrowers had only 3.8 customers per square mile—definitely rural, with high inherent costs.

In my conclusion, I will mention one final item. Last year, by avoiding REA's restrictive general funds policy, you helped REA to begin to make loans up to its authorized floor and to carry out the goals of the act. However, without additional action, the restrictive general funds policy would return on October 1 of this year. The old general funds policy should be avoided again this year.

In conclusion, I would simply say thank you for your interest in my life work, which is rural telephony, for your support of the telephone systems and for the REA program. I appreciate the opportunity to speak before you and look forward to any questions you may have now or in the future.

Senator BURDICK. Thank you.

[The statement of Mr. Miller follows:]

## STATEMENT OF BENNET R. MILLER

### Opening Remarks

Mr. Chairman and Members of the Subcommittee, I am Bennet R. Miller, President of the Tri-County Telephone Company, New Richmond, Indiana, appearing before you as a representative of the United States Telephone Association (USTA), which I serve as first Vice President. USTA represents over 1100 member companies, including the Bell operating companies. Together, USTA members provide over 99% of all access lines in the U.S. through firms ranging from publicly-held corporations listed on the New York Stock Exchange to family-owned companies or companies owned by their customers.

The nation's local telephone companies are dedicated to two things - serving the nations telecommunications needs and maintaining universal service. USTA members, large and small, firmly believe that in order to maintain a healthy and growing rural telephone industry, that provides universal telephone service, the targeted assistance offered by a strong and viable Rural Electrification Administration (REA) is needed.

### Summary of Recommendations

The United States Telephone Association (USTA) recommends the following for the REA Telephone Program:

- The continuation of a strong REA Program and Universal Service.

- Financing:
  a. a freeze of FY 1986 lending levels; 250 million for insured loans, 185 million for the Rural Telephone Bank and 125 million for loan Guarantees.
  b. $30 million capitalization in FY 1987 for the Rural Telephone Bank
  c. no rescission of $30 million capitalization in FY 1986 for the Rural Telephone Bank

- The continuation of the current range of interest rates.

- Freezing the REA administrative budget at the 1986 levels of approximately $30 million per year.

- Congressional direction for REA to continue reduced regulation of general funds.

We understand the requirements of the Gramm-Rudman Act for proportionate reductions in program levels to achieve overall budget objectives. However, the Administration's fiscal year 1987 proposals are nothing of the sort. They are a calculated attempt to phase out the REA program entirely, contrary to last year's three year budget agreement.

### Need for Financing

Utilities as an industry are capital intensive, and rural telephony is no exception. All utilities need to invest relatively large sums of capital to extend their service, modernize plant and provide new services. Rural utilities generally have higher costs and need relatively greater sums of capital to maintain universal service. The following chart shows the growth of REA Telephone Borrowers during the last 10 years:

| | 1984 | 1974 | Growth |
|---|---|---|---|
| Total Telephone Plant | 10,194,739,000 | 3,577,073,529 | 185% |
| REA Long Term Debt | 4,545,020,000 | 2,193,389,241 | 107% |
| Total Subscribers | 4,960,960 | 3,154,426 | 57% |
| One Party Subscribers | 4,081,783 | 1,869,888 | 118% |
| Route Miles of Line | 868,333 | 648,492 | 34% |
| Employees | 28,743 | 20,837 | 38% |

Even with this tremendous growth in rural telephony that has been financed with REA aid during this period, rural switching offices have generally not been modernized. The following shows the status of REA borrower switching offices:

| | |
|---|---|
| Total number REA borrower switching central offices | 5825 |
| Switching offices that are digital | 1134 |
| Capital needed per year to replace these offices during the next ten years | $153,587,000 |

The vast majority of REA borrowers' switching offices still have the mechanical step-by-step technology. To provide new services that urban customers will have and to continue the present level of telephone service, new switching offices will be needed. Maintenance of the old step-by-step offices is getting more expensive and parts are getting scarce.

In the last 10 to 15 years, REA borrowers have upgraded to mostly one party service. The bulk of the investment to accomplish this has been in buried cable, aerial cable and other equipment to provide the prevailing quality of voice grade service. The service life of this equipment varies, but experience demonstrates that a 15 year service life is not uncommon. The following shows the potential yearly capital need for replacing this plant.

| | |
|---|---|
| REA Investment in Outside Plant | $4,694,124,000 |
| Annual Capital Requirements to Replace over 15 years | 312,942,000 |

Given the need to update switching centers and the requirement to begin replacing outside plant, the 1986 authorized lending levels for REA are essential for rural areas and universal service. The job in rural areas is not done.

## Need for Low Interest Rates

The REA Program has a range of interest rates to fit the varying needs of Rural America. The present REA telephone loan programs reflect careful targeting of federal expenditures. In 1981, Congress limited the availability of 2-percent loans to cases of "extreme financial hardship", or cases when a 5-percent loan would cause rates to be substantially higher than the rates charged for similar service in the same or nearby areas by other telephone companies. In recent years, the "financial hardship" authority has not been used and all new insured loans have been at the 5% rate.

The Rural Telephone Bank (RTB) was established in 1971 and its current interest rate is 8.0%. The whole thrust of establishing the Rural Telephone Bank was to wean borrowers away from traditional REA financing as they gained financial maturity and were able to pay a higher rate of interest. This concept was not hastily conceived. It represented long study and thought on the part of the Department of Agriculture, the Rural Electrification Administration, REA borrowers and their associations.

Guaranteed loans can also be obtained from REA, with interest rates higher than the RTB.

The dramatic drop in interest rates over the past year has decreased the cost of the REA program by reducing the gap between REA's cost of borrowing and its lending rates. REA lending rates are nearer the market, but their level and availability are the key to rural telephone systems' provision of telephone service on an area coverage basis at reasonable rates.

Despite the accomplishments of REA, the need for low-interest and guaranteed telephone loans through the various telephone loan programs continues.

The Administration's proposed FY 1987 raises the interest rates on all REA loans to market rates plus 1-1/8%. In addition, loan origination fees would be assessed. The resulting rates would have a devastating effect upon small rural telephone companies.

The REA Telephone Loan Program does not significantly contribute to the deficit problem.

The following comparison of money paid to the Federal Government by REA telephone borrowers to the costs to the government of maintaining the REA illustrates the fact that REA telephone borrowers do not contribute to the Federal deficit in any significant way. As a matter of fact, the telephone program produces a net gain of over $10,000,000.

| Funds flowing from Telephone Borrowers to the Federal Government in 1984 (Thousands) | |
|---|---|
| Principal Payments | $126,379 |
| Interest Payments | 236,541 |
| Federal Income Taxes | 184,217 |
| Other Federal Taxes | 38,272 |
| | $585,409 |

| Authorized Telephone Loan Program in 1984 and half of REA's administrative costs (Thousands) | |
|---|---|
| Insured | $250,000 |
| Rural Telephone Bank | 185,000 |
| Guarantees | 125,000 |
| 1/2 REA Administrative Expenses | 15,000 |
| | $575,000 |

Telephone service in rural areas is an essential part of the rural infrastructure that keeps American agriculture productive. The return that is delivered to the economy in terms of increased agricultural production and reduced balance of trade problems has to be worth more than the cost of REA telephone program. Furthermore, the economic stimulus of the loans results in additional tax revenues to the federal government, making REA Telephone Loan Programs net contributors to the federal treasury. At this period of crisis in American agriculture, it is not the time to reduce the level of investment in rural areas. Employees of REA borrower companies and the investment of the REA in rural areas contribute significantly to the farm economy.

Over $1 billion in principal payments already has been repaid to REA. There has never been a default in the 34 year history of the REA telephone program. Truly, this is a record of which, as taxpayers, we can all be proud.

REA Telephone Remains a Rural Program

The average REA telephone borrower has a density of only 5.5 customers per mile of telephone line. That number was 4.9 in 1974. If one looks at density on the basis of customers per square mile, it is only 3.8 -- surely indicative of low density, with higher inherent cost.

REA Standards Division

Last year the Committee affirmed its support for REA standards by including report language advising the filling of vacancies in the Standards Division. Yet, this year the problem is worse - almost one-third of the authorized positions in the Division are vacant.

REA standards are a part of a rural engineering philosophy developed by REA over the years and have substantially strengthened REA loan security. The Industry believes that the logical place for rural standards is at REA and that adequate personnel should be assigned to this function.

General Funds

Last year, by voiding REA's restrictive general funds policy, you took a step which helped REA begin to make loans up to its authorized floors and more properly carry out the goals of its Act. However, without additional action, the restrictive general funds policy would return on October first of this year. The general funds policy should be voided again this year.

## NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

## STATEMENT OF DAVID STEWART, EXECUTIVE VICE PRESIDENT

Senator BURDICK. Our next witness will be Mr. David Stewart, executive vice president of the National Association of Conservation Districts.

Welcome to the committee, Mr. Stewart.

Mr. STEWART. Mr. Chairman, I am David Stewart, executive vice president of the National Association of Conservation Districts. I am here today to speak for the 17,000 board members of this Nation's 2,940 conservation districts.

We are particularly delighted to be here today as this is Soil Stewardship Week, May 4 through May 11, being observed across the country, and we think it's appropriate that we have this opportunity today. Our organization has sponsored this observance since 1954.

I have devoted most of my adult life to soil and water conservation activities, and for the past quarter of a century, I have worked in various capacities with the National Association of Conservation Districts.

Even more important is the fact that we now have nearly 17,000 laypersons throughout the United States who are directing soil and water conservation activities on the local level. They devote many, many hours of their valuable time to this endeavor without salary. They are truly dedicated stewards of this Nation's soil and water resources. They firmly believe that they must do everything within their power to leave the soil of our land and the water of our streams in as good or better condition than they have found it. They truly deserve the support of all of us in this Nation, and certainly the Federal support that has been forthcoming from the Federal Government over these past 40 years.

I earnestly believe that were it not for the tireless efforts of these dedicated local leaders, we would have a natural resources deficit rivaling the fiscal deficit facing this Congress. We have been able to protect our natural resources because: One, the Federal Government has made—and so far kept—a commitment to assist in this effort; two, the district officials have given their time freely and willingly to this cause; and three, State and local entities have made increasing efforts to match the Federal commitment.

NACD is asking you today to keep the Federal commitment as you have so ably done in the past.

### FISCAL YEAR 1987 BUDGET

Mr. Chairman, we believe that the budget proposed by the administration shows a great lack of understanding and shows a short-term view, at best, of the importance of keeping this Nation's vital food and fiber factory in good operating condition over the long haul.

As many of us remember, during World War II and thereafter, American agriculture was one of the pillars of our national security. We are well aware that this administration and all of Congress are under a great deal of pressure because of the Federal deficit. We recognize the need for fiscal restraint. However, we think the Federal resource program is too important to be crippled, and it deserves to be maintained without any decrease.

Therefore, our association's recommendation is for the same dollars in 1987 as were appropriated for fiscal year 1986. Specifically, NACD recommends, as shown in the chart that I have submitted, that SCS receive $625.9 million, ASCS $210 million for soil and water conservation activities, and other details as shown in our chart.

This Nation's ability to feed, clothe, and shelter ourselves and to keep our neighbors in this world and help them is still a high-priority item. If anyone doubts that resource conservation is important to food production and the well-being of the populace, just look at what is happening in Africa and many of the world's developing countries. The famine afflicting those areas can be directly attributed to the poor resource management that has led directly to the excessive soil erosion and increased desertification.

This Nation faced up to that fact 50 years ago, and it's time to reaffirm our commitment to proper resource management. Everyone seems to recognize the need for strong soil and water conservation programs. We must do more than talk about them, we must act. That task begins with this committee on a national level. NACD urges you to continue the leadership role you have assumed over the past 40 years. We urge you to provide the funding needed to keep our soil conservation efforts moving forward.

Mr. Chairman, thank you and the members of your committee for providing this opportunity for us to present the views of the National Association of Conservation Districts, and we stand by for questions, sir.

Senator BURDICK. Thank you. I would like to thank you for your time and your testimony, and I think it is very helpful to the committee. All the witnesses that have appeared before us today are entitled to our gratitude. Thank you.

[The statement of Mr. Stewart follows:]

## STATEMENT OF DAVID STEWART

| Program | FY86 Approp. | FY87 Budget | NACD Recommendation |
|---|---|---|---|
| | | (in million dollars) | |
| SOIL CONSERVATION SERVICE | | | |
| Conservation Operations | 363.3 | 362.0 | 363.3 |
| Grants to States & Districts | -0- | -0- | -0- |
| Special Areas Cons. Prog. | -0- | -0- | -0- |
| River Basin Surveys | 14.8 | 9.5 | 14.8 |
| Watershed Planning | 8.9 | 6.5 | 8.9 |
| Watershed Operations | 185.7 | 66.7 | 185.7 |
| Emergency Flood Repair | 45.0 | 1.1 | 5.0 |
| Great Plains Cons. Prog. | 21.4 | -0- | 21.4 |
| RC&D | 26.2 | 11.4 | 26.2 |
| RAMP | (9.4) | (.8) | (9.4) |
| Total SCS Appropriations | 665.9 | 457.7 | 625.9 |
| ASCS | | | |
| ACP | 188.9 | -0- | 188.9 |
| FIP | 12.4 | -0- | 12.4 |
| Water Bank | 8.7 | -0- | 8.7 |
| Special Areas Cons. | -0- | -0- | -0- |
| Colorado River Salinity Prog. | -0- | -0- | -0- |
| Emergency Conservation Prog. | -0- | -0- | -0- |
| Total ASCS | 210.0 | -0- | 210.0 |
| AGRICULTURAL RESEARCH SERVICE | | | |
| Soil & Water Cons. Res. | 62.0 | 62.1 | 62.0 |
| APHIS | | | |
| Animal Damage Control | 19.0 | 10.0 | 19.0 |
| COOPERATIVE STATE RESEARCH SERVICE | | | |
| Hatch Act | 155.5 | 155.5 | 155.5 |
| McIntire-Stennis | 13.0 | 13.0 | 13.0 |
| Rangeland Research | .5 | -0- | .5 |
| EXTENSION SERVICE | | | |
| General Formula Programs | 229.7 | 127.5 | 229.7 |
| Earmarked Programs | 75.3 | -0- | 75.3 |
| Renewable Resources Ext. | 2.5 | -0- | 2.5 |
| FARMER'S HOME ADMINISTRATION | | | |
| Rural Community Fire Prot. | 3.3 | -0- | 3.3 |
| Soil & Water Loans | 28.0 | -0- | 28.0 |
| Watershed Prot. & Flood Pre. | 14.0 | -0- | 14.0 |
| RC&D Loans | 2.0 | -0- | 2.0 |

Mr. Chairman, distinguished members of the subcommittee, I am David Stewart, Executive Vice President of the National Association of Conservation Districts. Even more important than representing our national organization, I am here today to speak for the more than 17,000 volunteers who are the officials of this country's 2,940 conservation districts and their more than two million cooperating landowners.

Mr. Chairman, I will be brief. I, like you, believe that we must do everything within our power to leave the soil of our land and the water in our streams in better condition than we found it. I am also here because I am deeply concerned that the budget proposed by the Administration for soil conservation and natural resource programs would reverse that very concept.

If I may, I would like to quote President Teddy Roosevelt on the subject of resource conservation. He said, "The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value." In fact, President Ronald Reagan used that very same quote not two years ago in a speech he delivered. Mr. Reagan went on to say, "Those words must remain an inspiration to all of us; an obligation to everyone charged with the stewardship of our resources."

Mr. Chairman, America's conservation districts come to your committee today because those are not just empty words to us. We are spending our time and our energies to improve and protect the soil and water resources of this country. And we are here today because the message sent by the Administration in its budget is all too clear -- resource protection is not a concern of the federal government.

NACD strongly disagrees. A national program to control soil erosion and improve water quality necessitates a strong federal presence. Nature does not recognize property lines nor state boundaries. If we are to have an impact on resource protection on our private lands, the federal role must be maintained and that means continued funding for the Soil Conservation Service and the Agricultural Stabilization and Conservation Service.

NACD recommends that in FY 87 the federal government provide the program funds as shown in the above chart and, specifically, that SCS receive $625.9 million and that ASCS receive $210 million for soil conservation activities in FY 87.

I know that you, the members of this committee and all of Congress are under a great deal of pressure because of the federal deficit. Our members recognize the need for fiscal restraint, but there comes a time when we have to say this program is too important, it deserves to be maintained and further cuts would cripple the program. We have reached that point with our soil conservation programs.

Since 1977 the Soil Conservation Service alone has lost 25 percent of its purchasing power. In terms of constant dollars, we have seen a steady decline in the real federal commitment to soil conservation. NACD feels that we have reached the point where this trend must be stopped. We have invested too much and have too much at stake to falter now.

We currently have 288 million acres of private land in this country with erosion problems. More than 180 million of those acres are for crop production. That is more than 40 percent of our total cropland base. To allow this land to degrade further is folly. But, under the Administration's budget proposal that is just what would happen. They would cut total federal soil conservation programs by 58 percent and I believe we would see that total of eroding acres increase.

That jeopardizes our ability to feed ourselves and our neighbors in this world. If anyone doubts that resource conservation is important to food production, just look at what is happening in Africa and many of the world's developing countries. The famine affecting those areas can be directly attributed to poor resource management that has led directly to excessive soil erosion.

The United States was taught that same lesson fifty years ago. However, this Administration seems to be forgetting our recent past. It is now up to you and this committee, Mr. Chairman, to reaffirm our commitment to proper resource conservation.

Productivity of our cropland is but one reason to support soil conservation efforts. We can now identify soil erosion and sediment movement as a major impediment to achieving our water quality goals.

Nonpoint source pollution (NPS) is now the area of emphasis for water quality specialists. When we look at NPS pollution, we see that proper land treatment is the key to improving water quality and our federal soil conservation programs provide those needed land treatment techniques.

The conservation districts are moving forward to address this problem, but they can not do it alone. Sediment movement does not recognize the political boundaries man has placed on the land. A national program is needed to reach our water quality goals.

That program is already in place out there. The current field office structure of the SCS and the ASCS can provide private landowners with the information needed to control soil erosion. Every state government has a soil conservation agency to provide assistance and direction. Conservation districts are the local link in the program. Being elected officials and local residents provides these officials with an opening to sell soil conservation to their neighbors.

The President's own Council on Environmental Quality calls for increased land treatment efforts in its 15th annual report. That reports points to nonpoint pollution as the major water quality issue of the future. Yet, the budget out of OMB will make gains in this arena impossible.

In addition, we have the 1985 Farm Bill which encourages and even requires greater soil conservation efforts of the producers in federal crop programs. NACD supported those provisions. However, the federal government must help provide the farmer with the tools to be in compliance with the law. Ending soil conservation programs will doubly penalize the landowner. They will not be able to get the technical assistance needed to remain eligible for the farm programs, and then they will no longer receive program benefits. It puts the farmer in a no win situation.

Everyone seems to recognize the need for strong soil conservation programs. However, we must do more than talk about soil conservation -- we must act. That task begins with this committee's actions. NACD urges you to continue in the leadership role you have assumed. We urge you to provide the funding to the SCS and ASCS needed to keep our soil conservation efforts moving forward.

Mr. Chairman, thank you for providing me with this opportunity to present our views.

## SOIL CONSERVATION SOCIETY OF AMERICA

### STATEMENT OF NORMAN A. BERG, WASHINGTON REPRESENTATIVE

Senator BURDICK. Our next witness will be Mr. Norman Berg, Soil Conservation Society of America.

Welcome to the committee, Mr. Berg. We have seen you many times before.

Mr. BERG. Thank you, Mr. Chairman. I represent the Soil Conservation Society of America. This organization, as you so well know, Senator Burdick, was dedicated to advancing the science and art of good land use. It was organized in 1945 and is international in membership. I am proud to have this opportunity to represent the thousands of conservationists who, by their work in the field, utilize the resources made available by your committee. They translate the appropriations authorized by Congress into a myriad of activities that result in soil, water, and watershed conservation programs for the benefit of all citizens. We do appreciate the time you allow the society to react to budget proposals by the administration for fiscal year 1987 for several USDA agencies.

Our prepared testimony deals primarily with the USDA Soil Conservation Service, the Agricultural Conservation Program, and other significant efforts such as research, extension, and credit that are needed to help solve serious soil and water conservation problems. And we do appreciate that the full statement will be made part of the official record, as you have said. Thank you.

Last year our organization went on record along with many other conservation organizations saying that we too were concerned about the outlook and that it will take our collective efforts to ensure that conservation programs do not take more than their fair share of the cuts as the U.S. struggles to bring Federal spending in line with Federal revenues.

However, we felt at that time, and still do, that the natural resource and conservation agencies had, for the most part, over the past decade, more than done their fair share of shrinking.

For fiscal year 1986 the Congress did not agree with the administration that only the conservation operations in the Soil Conservation Service should be continued. We had hoped that message would travel through to those who annually go through the ritual of trying to dismantle SCS programs carried out through conservation districts. It will be a challenge to those who administer any future reductions under the Deficit Reduction Act to maintain all high-priority work carried out through all of the SCS programs, and the agency personnel should have that option and flexibility.

Therefore, we do support the Congress in our recommendations and our testimony that would hold the line for another year, especially while agriculture is undergoing the very severe stress that it's under. Unless all Federal programs, including defense and entitlement spending, were subject to across-the-board reductions, our society defends continuing all of the soil and water conservation activities in USDA for 1987 at the 1986 level.

As one former chief of the SCS, I am disturbed by the continuing efforts of the administration to shift an undue burden of the soil and water conservation work to non-Federal governments. A major portion of soil conservation is already financed by individual farmers, ranchers, and foresters who operate the private lands of the Nation. They not only produce the food and fiber for domestic and worldwide needs, they are the custodians and stewards of the land and waters for all of society, and the long-term benefits of their works is of concern to all levels of government, and Federal funding for every program assigned shouldn't be a continual controversy.

CONTRIBUTIONS OF STATE AND LOCAL GOVERNMENTS

Recently, State and local governments have been doing a remarkable task of supplementing the funds of the department to help the land users carry out their work. When the Federal support is threatened, as it has been in the past few years, the balance of financing and other assistance needed is placed in jeopardy.

Finally, Mr. Chairman, the Food Security Act of 1985, Public Law 99–198, has strengthened the soil and water conservation efforts of the department and should add to the rationale for fiscal year 1987 budgets of the above agencies to be kept at a reasonable level. The additional action taken by Congress very recently to assure that any new program is not at the expense of the traditional good work is excellent. Title XII can well shape the future of soil and water conservation into the next century when it's fully implemented.

Mr. Chairman, if the U.S. Department of Agriculture has not yet made their flowchart, their decision "go, no go" chart available, perhaps it should be made part of the record. It shows the ultimate impact of the Conservation Reserve Program, the sodbuster and swampbuster provisions, and the conservation compliance requirements of the farm bill of 1985. I have sufficient copies here for the committee.

We know your task becomes more intense, Senator Burdick, more challenging and more complex each year, and members of our society appreciate the continuing support that you have given to the conservation work. Thank you.

Senator BURDICK. Well, we certainly appreciate your contribution over the years. As I look at the graph you have on the back of your written testimony, showing the drop in funding for all funds, it's pretty disheartening to see that drop in the last 4 years. I don't think the Nation can suffer any further drops.

Mr. BERG. Well, we certainly agree with that, Senator, and we know the good work of your committee. As I say, the additional emphasis in the Farm Security Act adds to the need to have this work strengthened, not weakened. Thank you.

Senator BURDICK. We will do what we can.

[The statement of Mr. Berg follows:]

## STATEMENT OF NORMAN A. BERG

I am Norman A. Berg,representing the Soil Conservation Society of America (SCSA). This organization,dedicated to advance the science and art of good land use, and organized in 1945,is international in membership.I am a charter member and fellow,and am proud to have this opportunity to represent the thousands of professional conservationists,who by their work in the field,utilize the resources made available by your Committee.They translate the appropriations authorized by Congress into a myriad of activities that result in soil,water and watershed conservation programs ,for the benefit of all citizens.We appreciate the time you allow SCSA to react to budget proposals,by the Administration for FY'87, for several U.S.D.A. agencies. Our prepared testimony deals primarily with the U.S.D.A.Soil Conservation Service(SCS),the Agricultural Conservation Program(ACP),and other significant efforts such as,research,extension and credit needed to help solve serious soil and water conservation problems.

Resource conservation,for over a half century,has been viewed as a mutual concern and responsibility for all levels of our governmental system.In concert with the farmers,ranchers and foresters,who own and use the land to produce food and fiber, the public has shared the financial burden of soil and water conservation.The challenge we now face is to get the federal expenditures in line with federal revenues,along with making certain that our natural resources are not further degraded. The Administration's proposed 1987 budget,sent to Congress on February 5,1986,contains relatively few surprises for career conservationists and natural resource agencies.As in prior years,the President proposes to make government "leaner" and allegedly more efficient,thereby shaving billions of dollars off the annual federal deficit.This is a continuation of cut-backs of federal government involvement in several domestic areas,as planned and proposed for the last several years.

In the natural resource and conservation area the proposals range from restricting the new construction activities of several agencies to terminating "non-essential" federal work. The President has made clear his strategy: Cut domestic spending,raise military spending,and hold tax revenues steady at the 1985 level.This has been the thrust of the Administration for the past five years.Grammm-Rudman-Hollings is a new pressure mechanism,the law of the land,to force both the U.S.Congress and the Administration to reduce the annual federal deficit to zero over the next five years.It is a sign that the Nation does in fact want to reduce the deficit.To do this you are faced with choices to:(a)cut overall spending significantly,(b)raise revenues,or(c) a combination of both.

Last year SCSA went on record,along with other conservation organizations,testifying,"we too are concerned about the outlook,and that it will take our collective efforts to ensure that conservation programs do not take more than their fair share of cuts as the U.S. struggles to bring federal spending in line with federal revenues".However,we felt that the natural resource and conservation agencies had ,for the past decade,already done their fair share of shrinking.Since 1978 real dollar spending for defense has increased by 50 percent, payments to individuals has risen by 30 percent,and the interest on the federal debt has nearly tripled.These are the increases in funding that have led to the Deficit Reduction Act.During that same period,the Soil Conservation Service has lost about a fourth of their ability,in constant dollars, to perform.Other natural resource and conservation functions experienced similiar reductions in their programs.The proposed budgets for F.Y.1987,would continue this serious slide downward for soil,water and watershed programs.For every federal dollar,defense would get 28 cents,the interest on the debt-15 cents,state and local governments would get 10 cents and the payments to individuals would take 41 cents of every $1. This leaves 6 cents for all other federal activities.U.S.D.A. soil and water conservation program funding is only a blip on the spending curve.Unless all federal programs,including defense and entitlement spending,were subjected to across-the- board reductions,SCSA would defend continuing all U.S.D.A. soil and water conservation activities for FY'87 at the FY'86 level.

### Soil Conservation Service:

As one former Chief of SCS,I am disturbed by the continuing efforts of the Administration to shift an undue burden of the soil and water conservation work to nonfederal governments. A major portion of soil conservation is financed by individual farmers,ranchers and foresters,who operate the private lands of the nation.They not only produce the food and fiber for domestic and world-wide needs,they are the custodians and the stewards of the lands and waters for all of society.The long-term benefits of their soil and water conservation work is of concern to all levels of government.Federal funding for every program assigned to SCS shouldn't be a continual controversy.

For FY'86,the Congress did not agree with the Administration that only"Conservation Operations" should be continued. Many had hoped that message would travel through to those who annually go through the ritual of trying to dismantle SCS and all programs they carry out through conservation districts.It will be a challenge to those who administer any future reductions,under the Deficit Reduction Act,to maintain the highest priority work carried out through all the SCS programs.Agency personnel should have that option and flexibilty.Therefore,we would support the Congress in the following recommendations:

| Soil Conservation Service (in million dollars) | -FY'86- Approp. | -FY'87- Budget | -SCSA- Recommendation |
|---|---|---|---|
| Conservation Operations | 363.3 | 362.0 | 363.3 |
| River Basin Surveys | 14.8 | 9.5 | 14.8 |
| Watershed Planning | 8.9 | 6.5 | 8.9 |
| Watershed Operations | 185.7 | 66.7 | 185.7 |
| Emergency Flood Work | 45.0 | 1.1 | 5.0 |
| Great Plains Cons.Prog. | 21.4 | -0- | 21.4 |
| R.C.& D. | 26.2 | 11.4 | 26.2 |
| R.A.M.P. | (9.4) | (.8) | (9.4) |
| Total SCS Funding | $665.9 | $457.7 | $625.9 |

### Agricultural Stabilization and Conservation Service:

The SCSA has long supported several cost-share programs that provide the general public a way of helping landusers fund the conservation practices that have off-site benefits. Many times in the past this Committee has had to restore the funds needed to maintain this work.Many non-federal governments are adding their resources to help install best management practices to implement water quality and wildlife habitat improvement programs.This is not the time for the federal ACP and other cost-share programs to be terminated.SCSA will help Congress to defend the following recommendations:

| ASCS<br>(in million dollars) | -FY'86-<br>Approp. | -FY'87-<br>Budget | -SCSA-<br>Recommendation |
|---|---|---|---|
| ACP | 188.9 | -0- | 188.9 |
| FIP | 12.4 | -0- | 12.4 |
| Water Bank | 8.7 | -0- | 8.7 |
| Total ASCS | $210.0 | -0- | $210.0 |

Agricultural Research Service & Cooperative Research Service:

SCSA would support the federal research proposals as follows:

| (in million dollars) | -FY'86-<br>Approp. | -FY'87-<br>Budget | -SCSA-<br>Recommendation |
|---|---|---|---|
| Soil & Water Cons.Res. | $62.0 | $62.1 | $62.0 |
| Hatch Act | $155.5 | $155.5 | $155.5 |
| McIntire-Stennis | 13.0 | 13.0 | 13.0 |
| Rangeland Research | .5 | -0- | .5 |

Extension Service:

The Administration has simply not been realistic in their proposal for the cooperative extension funding.The non-federal governments have been partners in this work for many years.To try and change this approach has generated a storm of protest from throughout the nation.SCSA would support the Committee and the U.S.Congress as follows:

| Extension Service<br>(in million dollars) | -FY'86-<br>Approp. | -FY'87-<br>Budget | -SCSA-<br>Recommendation |
|---|---|---|---|
| General Formula Programs | 229.7 | 127.5 | 229.7 |
| Earmarked Programs | 75.3 | -0- | 75.3 |
| Renewable Resources Ext. | 2.5 | -0- | 2.5 |

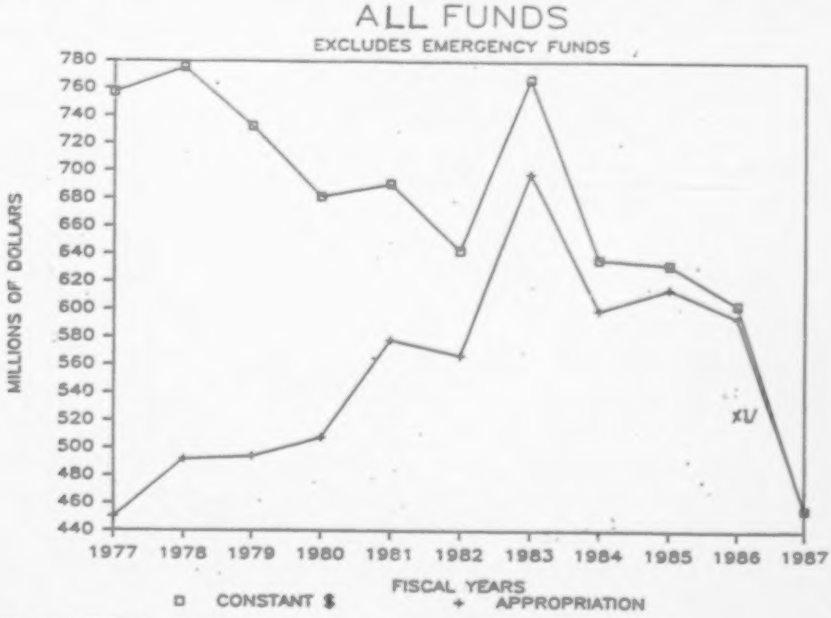
Farmers Home Administration:

The Administration proposes to eliminate the SCS programs that would require credit,such as the Small Watershed and the Resource Conservation and Development Programs.Over the years the federal government has made commitments to assist towns and cities to build flood prevention structures that protect portions of their lands from flooding.In some instances,the structures are built to provide municipal and industrial(M&I) water.Many local entities have secured land rights and are awaiting the SCS to design and provide funds for construction.These are commitments that should be honored. SCSA would,in harmony with the '87 budget items we recommend for SCS,support the funding for FmHA loans as follows:

| Farmers Home Administration<br>(in million dollars) | -FY'86-<br>Approp. | -FY'87-<br>Budget | -SCSA-<br>Recommendation |
|---|---|---|---|
| Soil & Water Cons.Loans | 28.0 | -0- | 28.0 |
| Watershed & Flood Prev. | 14.0 | -0- | 14.0 |
| R C & D Loans | 2.0 | -0- | 2.0 |

Mr. Chairman,the SCSA,as the above recommendations indicate, is in favor of continuing federal funding ,through FY'87,at a a level we think is reasonable.State and local governments have been doing a remarkable task of supplementing the funds of U.S.D.A.,to help the landusers implement soil and water programs.When the federal support is threatened,the balanced financing and other assistance needed,is placed in jeopardy.

The Food Security Act of '85(P.L.99-198)has strenghtened the soil and water conservation efforts of U.S.D.A.and should add to the rational for FY'87 budgets of the above agencies to be kept at reasonable levels.The additional action taken by the Congress to assure that any new program is not at the expense of traditional work is good. Your task becomes more intense , complex and challenging each year.Members of SCSA appreciate the continued support you have given for conservation!Thanks.

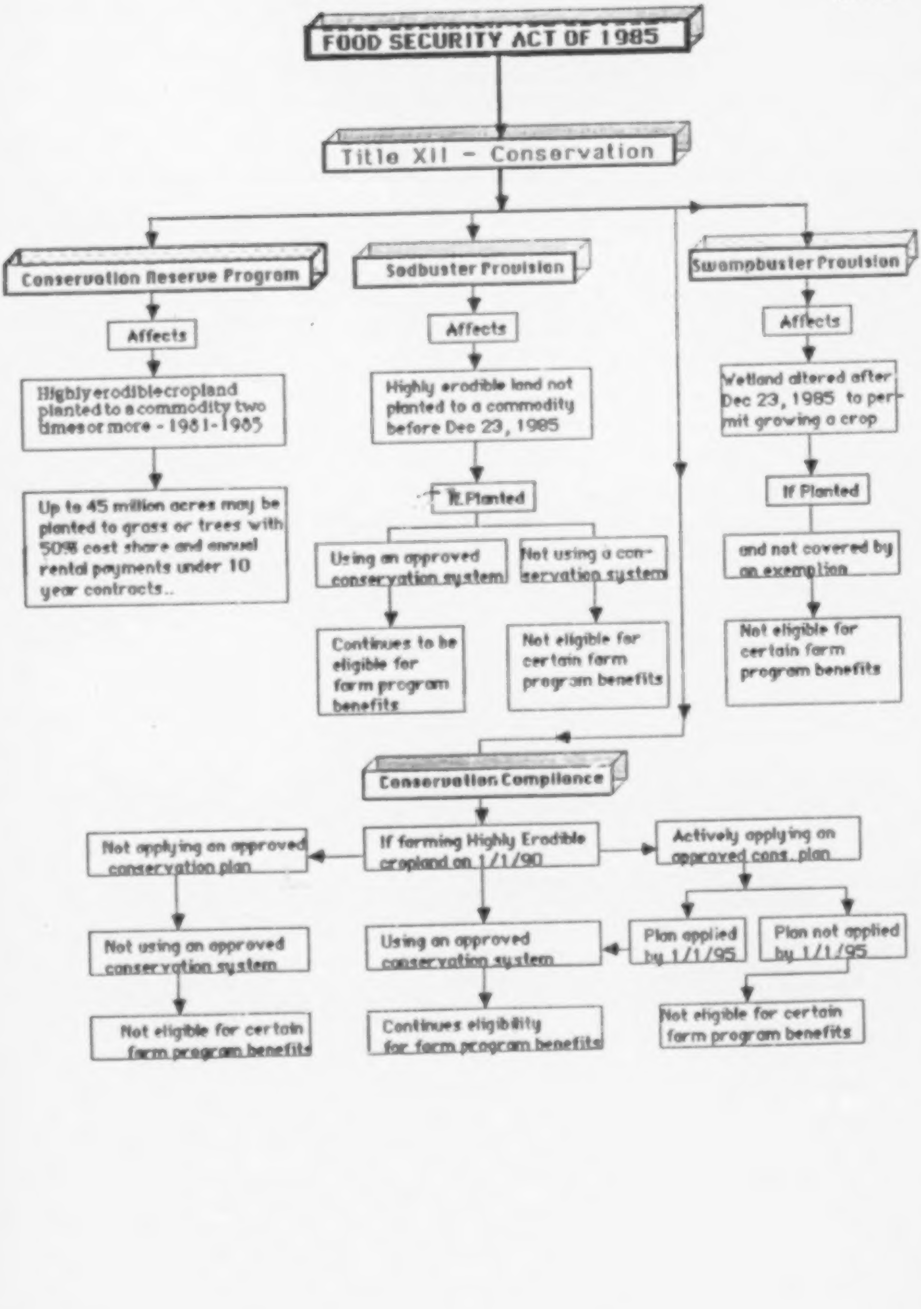


Appropriation in: (millions)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Actual dollars... | $450.2 | $492.4 | $494.5 | $508.1 | $578.2 | $567.0 | $698.3 | $599.9 | $615.4 | $594.6 | 1/ 456.0 |
| Constant dollars. | $757.3 | $775.4 | $732.6 | $681.7 | $690.0 | $642.9 | $767.2 | $636.6 | $632.7 | $603.9 | 456.0 |

1/ 1986 estimate would be $534.6 million if the President's Rescission proposal for GPCP ($6.6 million) and WFPO ($54.3 million) are approved.

3/27/86


FOOD SECURITY ACT OF 1985
Title XII - Conservation
Conservation Reserve Program
Affects
Highly erodible cropland planted to a commodity two times or more - 1981-1985
Up to 45 million acres may be planted to grass or trees with 50% cost share and annual rental payments under 10 year contracts..
Sodbuster Provision
Affects
Highly erodible land not planted to a commodity before Dec 23, 1985
If Planted
Using an approved conservation system
Continues to be eligible for farm program benefits
Not using a conservation system
Not eligible for certain farm program benefits
Swampbuster Provision
Affects
Wetland altered after Dec 23, 1985 to permit growing a crop
If Planted
and not covered by an exemption
Not eligible for certain farm program benefits
Conservation Compliance
If farming Highly Erodible cropland on 1/1/90
Not applying an approved conservation plan
Not using an approved conservation system
Not eligible for certain farm program benefits
Using an approved conservation system
Continues eligibility for farm program benefits
Actively applying an approved cons. plan
Plan applied by 1/1/95
Plan not applied by 1/1/95
Not eligible for certain farm program benefits

## Barnes-Aastad Soil and Water Conservation Research Association, Inc.

### STATEMENT OF WILLARD R. MICKLISH, DIRECTOR

### ACCOMPANIED BY JOHN F. STOCK, M.D.

Senator Burdick. Our next witness will be Mr. Willard Micklish, Barnes-Aastad Soil and Water Conservation Research Association, and John F. Stock.

Welcome to the committee, gentlemen.

Mr. Micklish. Thank you very much, Senator, for having our association before your committee. We represent the North Central Soil and Water Research Center, and I am a businessman in Minnesota. I represent the Cass Clay Creamery in my own employment up in Fargo. Dr. Stock here is an internal medicine specialist. Also, he was born and raised on a farm and is still an active farmer today.

Senator Burdick. Just for the record, I should note that I am a former attorney for that Cass Clay Creamery.

Mr. Micklish. And, I understand, a very excellent one.

Senator Burdick. That's when they made their great advances. [Laughter.]

Please proceed.

Mr. Micklish. Thank you. We also are representing the Eastern South Dakota Soil and Water Research Farm at Madison, SD. We want to thank you, Senator Burdick, and your committee for your support of ARS and also the North Central Soil and Water Research Center at Morris.

I would now like to have our testimony submitted for the record. And also, Dr. Stock here can make a few additional remarks, with your permission.

Senator Burdick. Doctor?

### REMARKS OF DR. STOCK

Dr. Stock. Mr. Chairman, at the current time, most of our rural areas are suffering through significant financial difficulties, as you know. These difficulties will likely not be solved by larger and more costly Government programs. Our current problems of high production costs and low prices have dealt a serious blow to the entire agribusiness complex. Since developing sustained higher prices is not a likely possibility, lowering the cost of production provides the only consistent hope for a long-term solution to our fiscal crisis.

ARS in general and the Morris, MN, location in particular are addressing potential solutions to this problem. The solutions include: Minimum and no-till systems, less purchased fertilizer, less purchased herbicides, and more efficient and prudent use of insecticides. Developing strains of plants that are more weed-resistant and thus need less herbicides is of utmost importance. The use of crop residues to inhibit or kill weeds is environmentally sound and, hopefully, can be refined to be practical and cost-effective.

Some specific examples of ongoing research at the Morris, MN, location that may provide some of the solutions that we have discussed include the following: Item A is the development of strains of soybeans for the Northern Corn Belt that produce low-spreading leaves. Low-spreading leaves inhibit weed growth markedly simply by the canopy effect. Currently, it's estimated that availability of such a variety would save $20 million in the Northern Corn Belt. It would reduce soybean herbicide usage by approximately 50 percent.

Example B, by collecting crop residues such as straw from wheat, cornstalks, and soybean straw, placing them in a simple bioreactor, adding acetone or alcohol, effluents can be produced that are highly toxic to weeds. One of the most highly toxic substances happens to come from the common sagewort, which you and I probably know as stinkweed. This particular extract can kill 95 percent of pigweeds with rates of application similar to that we use now with Duobleedex and the like.

Item C, example C, with regard to corn, the Morris location is studying row size, plant population, and the biochemical content of crop residue. This will allow us, hopefully, to obtain lower input costs. Narrow rows of 15 inches versus 30 inches, for example, will save water, choke out weeds, use fertilizer and herbicides more efficiently, and give a yield advantage.

In the limited time that we have, other projects and ideas, of course, can't be discussed, but the given examples generate enthusiasm within our Barnes-Aastad Association. We hope our enthusiasm will encourage your committee to solidify funding for this very important research and the very many other important topics of the Morris, MN, location.

In summary, efforts at focusing research to lower input costs and maintain productivity are of utmost importance to agriculture today. We must avoid duplication of facilities and costly, nonproductive avenues of research. The investment in research is very small by dollar amounts, but holds the greatest potential for a profitable, nonsubsidized agriculture. Thank you for your time.

Senator BURDICK. We thank you.

We will be off the record for a moment.

[Discussion held off the record.]

[The statement of Mr. Micklish and Dr. Stock follows:]

### STATEMENT OF WILLARD R. MICKLISH AND JOHN F. STOCK

Our association has appeared before this committee in each of the past 16 years in support of overall USDA-ARS research, and in particular for support of the ARS research conducted at the North Central Soil Conservation Research Laboratory, Morris, Minnesota. We wish to thank you for the privilege and opportunity to once again appear before you in support of the laboratory's research program. As active board members of our association of interested farmers and businessmen, we speak to the concerns of the agricultural community located in the Northern Corn Belt where the laboratory is situated.

We are well aware of the economic crisis that plagues today's American farmer. We are also aware of the efforts to reduce Federal spending and to increase accountability and effectiveness of available funds. In response, ARS continues to investigate agricultural problems of highest priority to improve the economic conditions for today's farmer while protecting our water resources for the future. To assure maximum funding possible for bench research during these times of reduced budgets, the administration of ARS has actively and efficiently streamlined the agency for more efficient operations, cost-effectiveness, and accountability. We support this action which allocates available funds to laboratories having high priority research programs.

The research mission of the North Central Soil Conservation Research Laboratory at Morris, Minnesota, is to develop efficient conservation production systems for northern climates while maintaining or improving the quality of our water resources. Research to accomplish this mission is being conducted cooperatively with the agricultural experiment stations of the University of Minnesota, South Dakota State University, and the USDA Northern Grain Insects Research Laboratory at Brookings, South Dakota.

The research team at the Morris Laboratory conducts ongoing research to develop and improve soil and water conservation and increase the efficiency of agricultural production. Emphasis is placed on reducing the input requirements for crop production. One activity includes research to limit the number of passes of field equipment, thereby reducing fuel requirements, reducing adverse effects of soil compaction due to wheel traffic, and promoting better residue management encouraging better soil conservation. Other research activities are designed to improve the efficiency of applied fertilizer for reduced tillage systems and to control the application of expensive chemicals by employing integrated weed and insect management systems. The laboratory's history of research accomplishments is to be envied, yet much remains to be done.

As producers of agricultural products, we are concerned that future resources be allocated to ensure improved crop production efficiency while maintaining our priceless agricultural soil base and water resources. With increased concern for the quality of our Nation's water resources as a result of inefficient use of agricultural chemicals, it is incumbent on the research community to discover techniques for protection of both our ground water and surface water resources. It is essential that the United States maintain its dominant position in agricultural production while protecting and preserving its resources and environment.

As farmers, we are being asked to provide domestic and world food and fiber needs with little profit and often at a loss. Obviously, this cannot continue without major disruptions in our overall agricultural production system with which we are so accustomed. As solutions are found for these problems of historic importance, we are confident that part of the solution will be additional knowledge obtained as a result of continuous, long-range basic agricultural research and its application to the Nation's farmlands.

The research program at the Morris Laboratory focuses on providing knowledge and recommendations regarding cost-effective production systems for application to the highly productive areas of the Northern Corn Belt. The Morris Laboratory wishes to have a scientist replaced who was transferred from the facility in 1984. This person will be used to integrate the various components of cost-effective production systems into a user-oriented model. This will allow more effective extrapolation of the basic physical processes involved to areas of other topography, climates, and soils for the purpose of determining the best production systems for nothern climates.

## American Forestry Association

### STATEMENT OF R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT

Senator Burdick. Our next witness will be Neil Sampson, executive vice president of American Forestry Association.

Mr. Sampson. Thank you, Mr. Chairman. It's a pleasure to appear here before you today and to bring from our association's point of view our support for the vital soil and water conservation programs of the Soil Conservation Service, the renewable natural resources extension budget of the Extension Service, and the Forestry Incentives Program, the Agriculture Conservation Program, and the Water Bank Program of the Agricultural Stabilization and Conservation Service.

In keeping, Mr. Chairman, with the witnesses that have preceded, we believe that these programs merit funding at continued levels in fiscal year 1987. We believe that the attempts of the President's budget to phase them out or phase them back or cut them out are spectacularly ill-timed as well as ill-conceived. These programs are programs that have undergone significant review and revision, targeting, focusing, and improvement over the last few years, and this seems a very strange way to reward those improvements in effectiveness and efficiency.

At the back of our testimony today I appended a series of graphs that I did from the President's budget documents, and I simply did these to show people the graphic view of what's happened to natural resources funding, soil and water conservation funding, and forestry funding in this country over the last few years.

When we look at the constant-dollar impacts of what has happened to us, we realize that these are programs that have been cut, and cut seriously, in their ability to assist the Nation's private landowners in their conservation efforts.

Mr. Chairman, it is our testimony that these cutbacks have proceeded as far as we dare let them. We really feel they have proceeded farther than is in the public interest, but we realize this is no time to reverse that trend, but we feel it is time to stop it. Your committee has been instrumental in doing that, and we simply leave you with the recommendation and the support from our association that you continue that trend.

We greatly appreciate the chance to come before you today. I would be happy to respond to any questions you might have.

Senator Burdick. I thank you very much, and your theory will be taken into consideration, you can be sure.

I have no other questions, but I will just simply say, thank you.

Mr. Sampson. Thank you.

[The statement of Mr. Sampson follows:]

## STATEMENT OF R. NEIL SAMPSON

The American Forestry Association, the national citizen's organization for trees, forests, and forestry, is deeply distressed by the proposed reductions to the U.S. Department of Agriculture's conservation budget for FY 87. We thank you for the opportunity to testify in support of maintaining the vital soil and water resource management programs of the Soil Conservation Service, the Renewable Natural Resources Extension budget of the Extension Service, and the Forestry Incentives Program and the Agricultural Conservation Program of the ASCS — at current funding levels.

The President's budget recommendations label as "non-essential," programs which have effectively developed and protected the productivity of our agricultural and natural resources. These are the very resources that have helped this nation assume its position as a world leader, Mr. Chairman, and we maintain that it is folly — and foolish economics — to abandon them now.

The Administration's proposals demonstrate an ignorance of the fundamental relationship between our food and fiber production capabilities and national stability. Soil erosion, for example, is as serious in many respects today as it was in 1935. In some regions in the breadbasket of the Nation, two acres out of every three are suffering more than tolerable soil loss, according to the 1982 National Resource Inventories. The current agricultural economy is not all that rosy, either. Without going into the sad story of increasing farm debt, high rates of farm bankruptcies, high costs and low prices, it is sufficient to say that farmers are fighting to stay in business under severe handicaps.

But what is today's political response to those problems which sound like a modern-day re-run of the 1930's? For the past five years, the United States has been embarked on an historic retrenchment of government involvement in many domestic areas. While this has cut into the natural resource, agriculture, and conservation programs seriously, it has also resulted in huge deficits, fueled by the steady rise of federal spending for defense, payments to individuals, and the interest on the debt itself. We have prepared, and attached to our testimony today, a report entitled "Into The Gramm-Rudman Era" to describe the effect of the Administration's fiscal and budget priorities on our enviromental and agricultural programs.

What these data show, we think, is that our forestry, conservation, and agricultural efforts have already done their share of shrinking. The modest investments that we as a nation have made in our most basic of resources, our soil and water, are not the cause of the deficit, and fool-hardily targeting them to absorb further severe cuts will have no impact on the deficit. What it will have -- and what we cannot afford — is a potentially devastating impact on resource stability and productivity in the years to come.

Some of the Administration's proposals are not only ill-advised, they are spectacularly ill-timed. The SCS, for example, has done a great deal of work in the past 8 years to sharpen and improve their programs under the encouragement of the Resources Conservation Act. They have targeted many programs, and improved management in virtually all phases of their activity. It is poor policy to reward such efforts with the kind of budget phase-out proposed by the Administration. We urge you to retain the SCS programs, particularly technical assistance and Watershed Protection, at the 1986 program levels.

When the Renewable Natural Resources Extension Act was passed in 1978, it enjoyed broad-based support from conservation organizations including wildlife and grazing, as well as forestry interests. Its primary function is to encourage the delivery of technical information and advice to small nonindustrial landowners. These people are the decision-makers on 58% of the nation's forestland, and 64% of our rangeland. Their attitudes and management decisions not only affect the level of natural resource commodity outputs from these lands, but also control the potential of these lands to provide wildlife habitat, soil and water protection, and outdoor recreation opportunities.

RREA encourages educational programs leading to more efficient, environmentally sound management of this vital component of our country's range and forest resource base. Federal support of these natural resource extension efforts serve as a magnet attracting funds from both private and public agencies and organizations for resource education programs. For every state level natural resource staff position provided by federal funds, state and local funds have generated 3 additional positions. We urge you to establish FY 1987 funding at the current level, which would maintain a viable program, although falling short of the goal of involving every state in the effort.

The Agricultural Conservation Program has also gone through intensive review and improvement in recent years. It was funded at a level of $190 million in fiscal '85 and '86, but is proposed for elimination in fiscal '87. We believe that funding for this program should be maintained at the $190 million level to cope with some of the very serious economic and conservation problems this country and its farmers are facing. We believe that the farmlands so vital to our future are experiencing levels of erosion and losses of soil fertility that must be controlled in order to protect the continued productivity.

ACP cost-sharing encourages the installation of erosion control measures which protect both our land and water resources. Our nation as a whole benefits from the prevention of serious topsoil losses and water quality problems; the ACP program is needed to continue the fight for soil and water conservation.

AFA is concerned with the elimination of the Forestry Incentives Program in the President's budget. Arguments are made that the federal government should not be supporting reforestation activities on private lands. That is an activity, supposedly, that should be the responsibility of state and local institutions or the forest products industry's small woodland owner assistance program. Although we strongly support a cooperative approach to encouraging good management and reforestation, we feel that the federal government has an important part to play in this area. State and local agency budgets and the forest products industry cannot handle the job alone.

The forestry incentives program has demonstrated its effectiveness in bringing about more acceptable levels of regeneration on cut-over lands. This, in turn, protects the future productivity of these areas, while allowing their continued productive use. In the southeastern United States, in particular, regeneration is not keeping up with harvests, and prime sites are reverting to low-value scrub hardwoods, FIP is a cost-effective method of addressing this problem.

We appreciate this chance to express our views.

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## INTO THE GRAMM-RUDMAN ERA . . .

**Introduction**

The following set of graphs and explanatory materials is an attempt to explain recent trends that have affected federal budgets, as well as point out where the current plans for federal spending being developed in the Administration will lead if the Congress accepts them. The material is drawn from the 1987 Federal Budget Documents produced by the Office of Management and Budget. (1984 spending figures come from the 1986 books.)

The constant-dollar comparisons are made with factors developed by the Bureau of Economic Analysis of the Department of Commerce. In 1987, the federal government shifted to a base using 1982 constant dollars, with the deflator factors developed by BEA. These can be found in table 6.1 of "Historical Tables", one of the 1987 Federal Budget Documents.

Using constant 1982 dollars allows a look at the comparative purchasing power of the federal program activities over the years, with the effects of inflation removed. In the charts, the term "Nominal Dollars" means the dollar amounts that actually were appropriated or spent during the year in question. "1982 Dollars" converts those amounts to the equivalent "inflation-free" program levels.

Our goal is to understand the impact of recent budget trends on spending for natural resource programs, particularly forestry and soil conservation. We will also look at the spending plans for the next few years, as expressed in the budget documents. In order to understand these relatively small programs, we will begin with the total budget and continue to tighten our focus until we can see these programs in perspective.

## Federal Receipts and Outlays — 1970 - 1987

As figure 1 shows, federal receipts and outlays followed each other fairly closely from 1970 until 1980. The gaps produced federal deficits that were generally in the range of 6 - 60 billion dollars. In 1981, the gap began to widen rapidly, as receipts flattened off due to the 1981 Tax Bill and the recession. Receipts stayed flat from 1981 to 1983, then began to rise again at roughly the same rate as outlays. By then, however, the annual deficits were in the $200 billion-per-year range, where they continue at this time.

## Defense versus Non-Defense Spending

In constant-dollar terms, defense spending dropped by about one-third between 1970 and 1976. From 1976 until 1980, some increases were experienced, and in 1981 the current spending buildup began which has resulted, in 1986, in an increase of over 50 percent, in real-dollar terms, in defense spending.

Non-defense outlays grew steadily from 1970 until 1985, with only minor variations as the current Administration attempted to slow that growth in the 1981-1985 budgets. In real-dollar terms, non-defense spending has about doubled since 1970.

Non-defense spending is made up of several parts. The largest is called "Payments to individuals." They include outlays for medical care in veteran's hospitals, medicare, subsidies to reduce housing costs, and food stamps. A significant amount of these funds may be in the form of grants to states, who then administer the programs.

The second category is "Grants to States." These are the non-defense funds sent to state government that are not intended for use as payments to individuals.

Third is "Net Interest." This includes all interest paid, minus offsetting receipts. Most of the interest is paid to the public as interest on the national debt. In many ways, this is an "income transfer" program similar to "Payments to Individuals." The difference, of course, is that interest paid on the national debt transfers income from taxpayers to bondholders, which are likely to be financial institutions and wealthy individuals.

The fourth category is "All Other," and it is in this area that we find nearly all of the programs that make up the functioning of the federal government. It includes all federal loan activities and most federal spending for foreign assistance, farm price supports, medical and other scientific research, and, of course, all natural resource programs.

Figure 2a. shows how these components have changed since 1970. In general, payments to individuals make up most of the recent increases, with net interest beginning to assume a more dominant position since 1981 as the national debt has expanded. "All Other" expenditures have remained virtually unchanged for 15 years, in real-dollar spending terms. Grants to states have been on a gradual decline since 1978.

As these figures demonstrate, the growth in federal spending between 1970 and 1980 was virtually all the result of increases in welfare programs; the increases since then have resulted from continued growth in that area, compounded by a significant buildup in defense spending and an increase in net interest payments due to the increasing federal deficit. These relationships are, of course, expressed in constant-dollar terms.

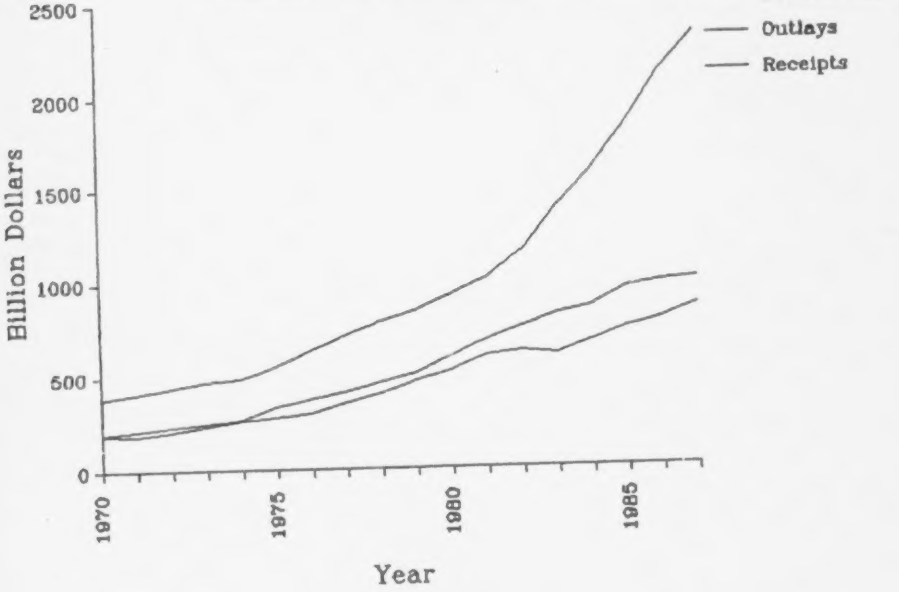


Figure 1.
FEDERAL RECEIPTS AND OUTLAYS

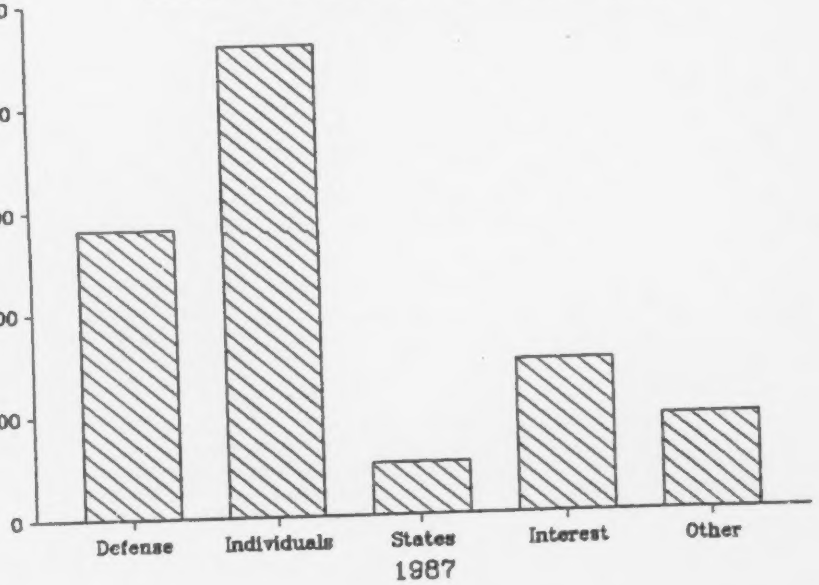
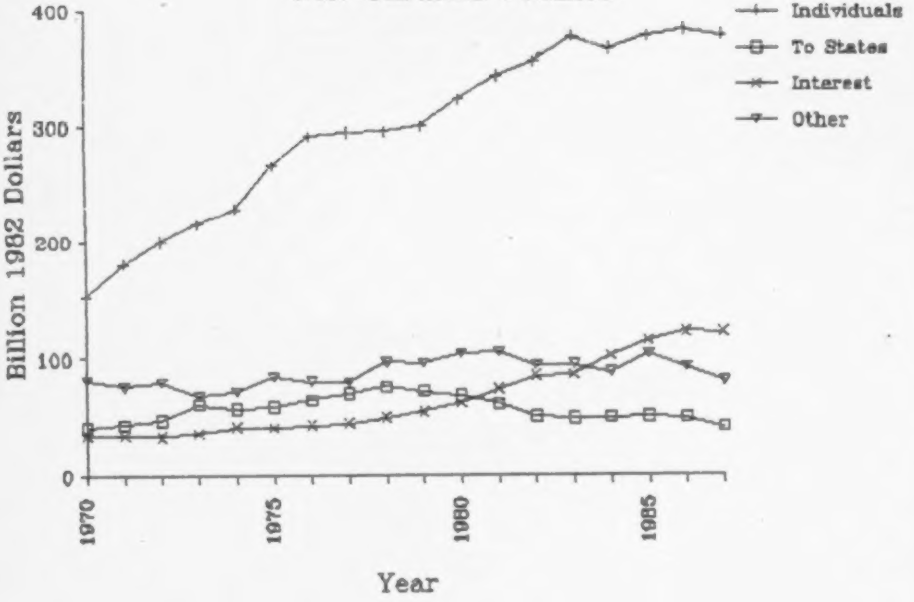


Figure 2.
FEDERAL OUTLAYS BY MAJOR FUNCTION

Figure 2a.

NON-DEFENSE OUTLAYS



**Natural Resources and Environment**

The recent trends and near-term plans for natural resource spending are shown by the series of line graphs (Figures 3 to 8).

There are 5 breakdowns within NRE, for budget purposes. Conservation and Land Management contains budgets for the Forest Service, Bureau of Land Management, Mining Reclamation and Enforcement, Conservation of Agricultural Lands (SCS technical programs and ASCS cost-sharing programs), and an "other" category.

Water Resources contains budgets for the Corps of Engineers, the Bureau of Reclamation, and the watershed programs of the Soil Conservation Service.

Recreational Resources contains federal land acquisition budgets for parks, urban and historic preservation, and operation of recreational resources.

Pollution Control and Abatement contains EPA programs, including Superfund and sewage treatment grants. It also contains some Corps of Engineers funding.

There is also an "Other" category which contains such programs as those of the Geological Survey, Bureau of Mines, and the National Oceanic and Atmospheric Administration.

Figure 3 shows that spending for NRE has declined since 1978, particularly when viewed in constant-dollar terms. That decline is planned to continue. If the Reagan budget projections are realized, real spending for natural resources and environment will drop by more than half between 1978 and 1990.

The spending trends in natural resource budgets will not be uniformly spread across the spending categories, as the graphs illustrate.

Pollution control, which peaked in 1978, will be only one-quarter as large, in constant-dollar terms, by 1990.

Water resources, which has shrunk by almost half since 1978, will hold at about the same purchasing levels under the current budget proposal.

Conservation and Land Management will virtually disappear, with revenues produced from public lands and resources supporting much of the Forest Service and BLM, while SCS services on private lands diminish to low levels and cost-sharing programs that assist in putting conservation on the land disappear.

Recreation will drop by over half, largely through the elimination of all land purchase activity.

Other NRE programs will hold fairly steady, having dropped slightly since the peak in 1979.

Figure 3.

NATURAL RESOURCES AND ENVIRONMENT

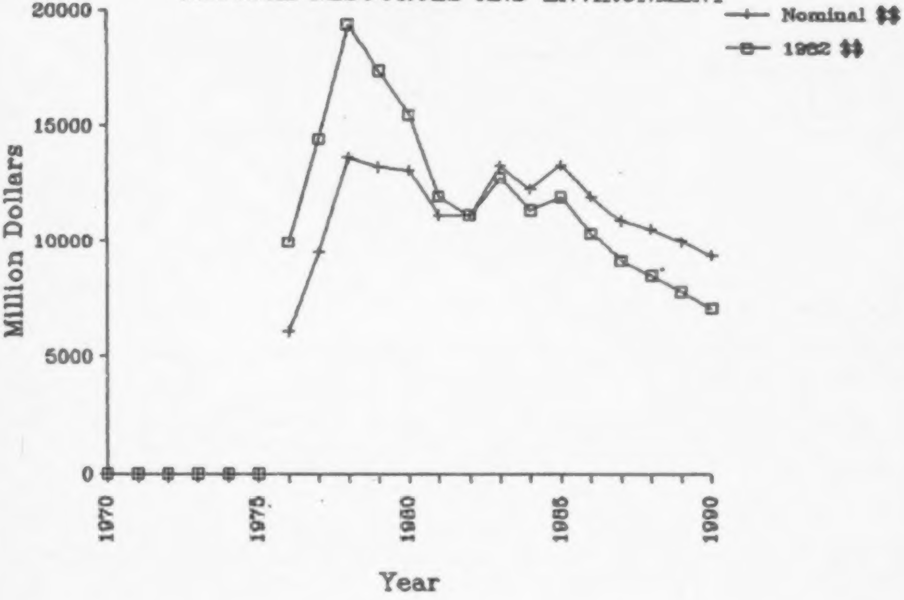


Figure 4.
Conservation and Lands

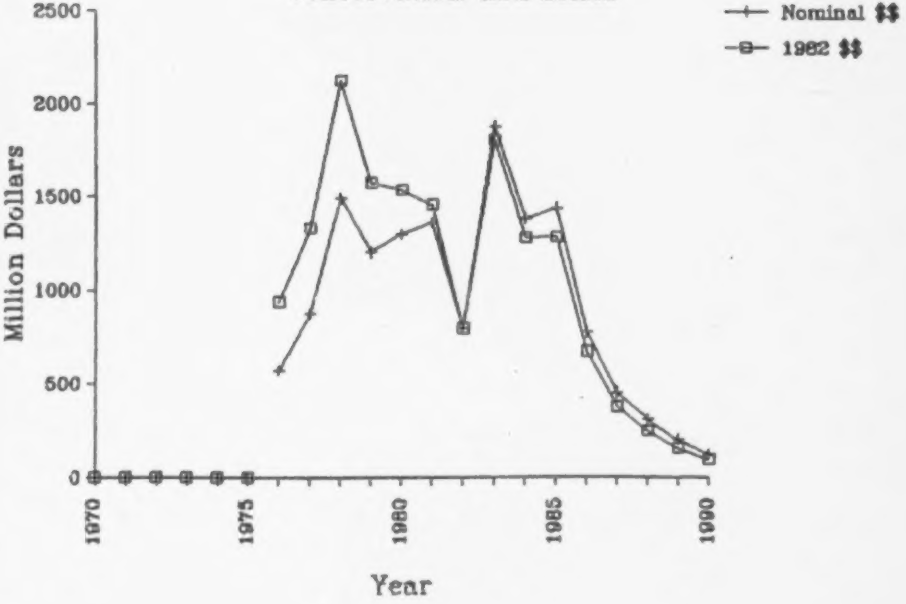


Figure 5
Water Resources

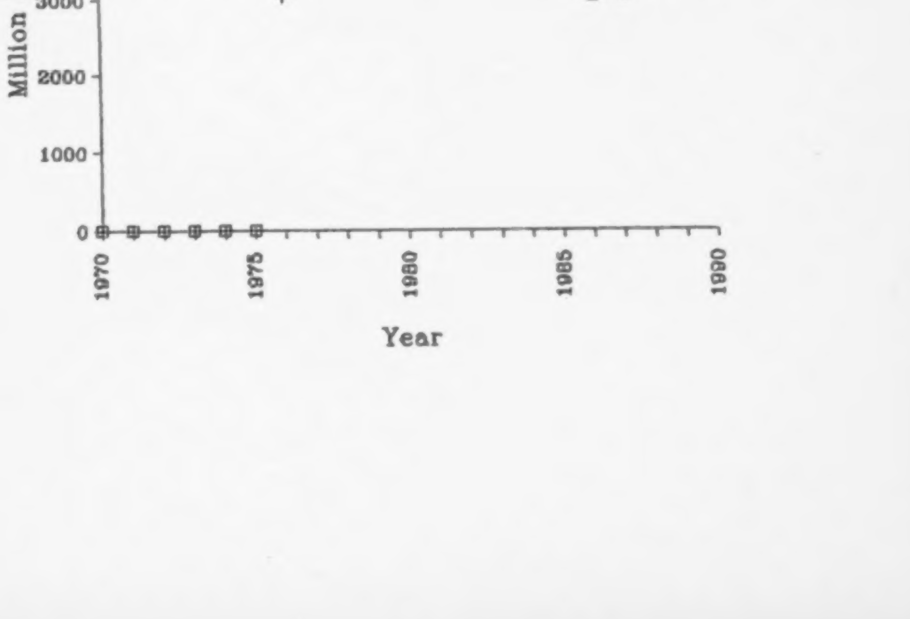


Figure 6.
Recreation

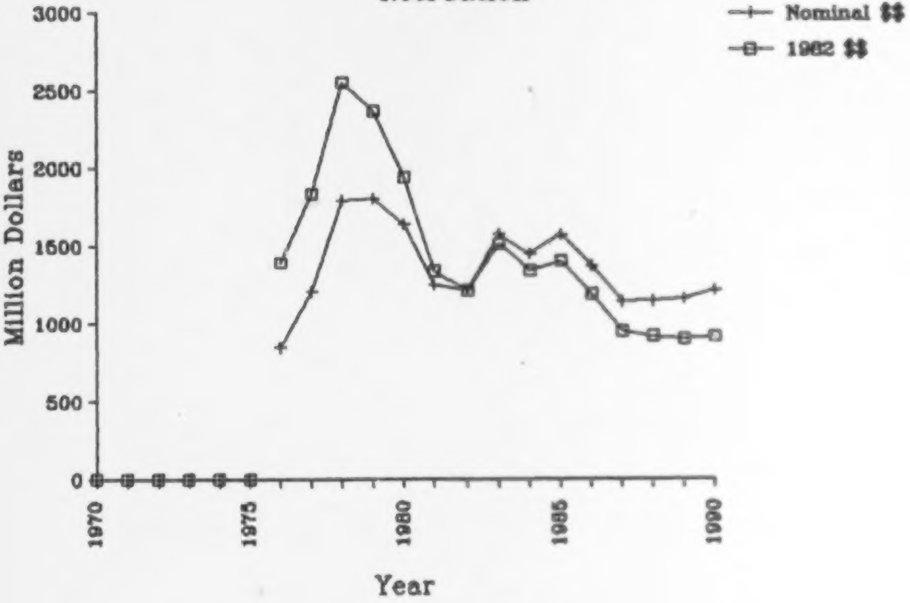


Figure 7.
Pollution Control

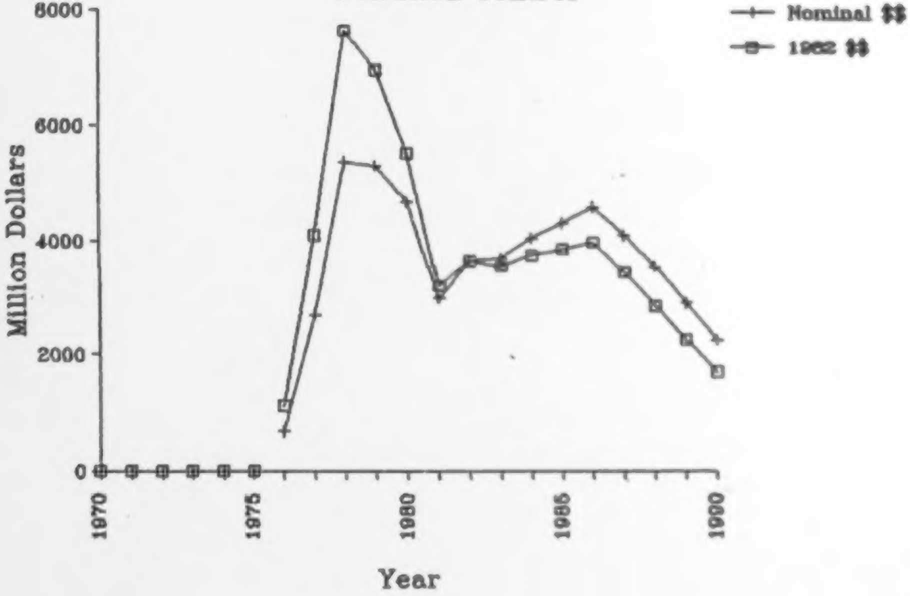
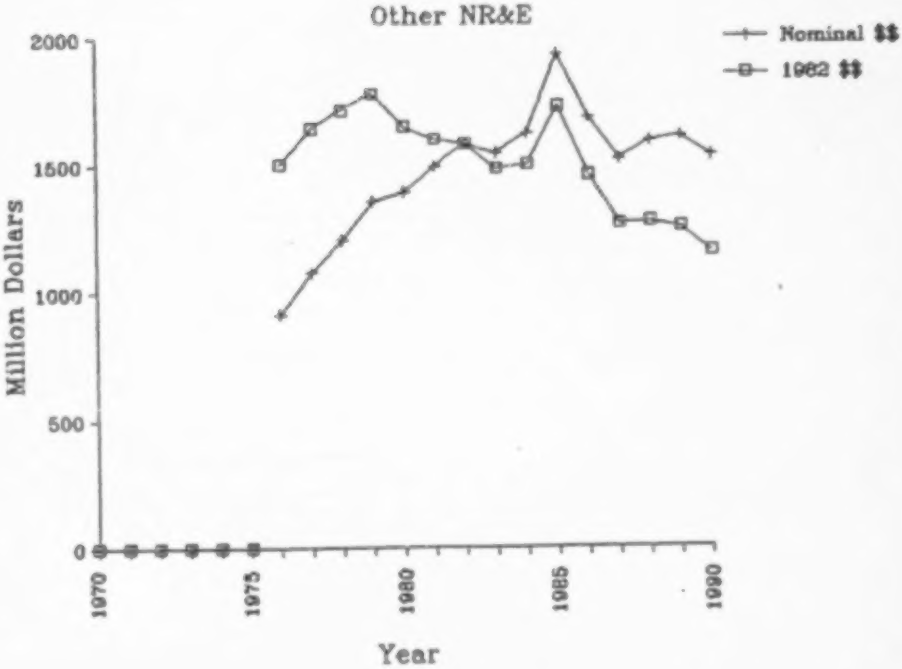


Figure 8.



**Budget Impacts on Selected Agencies**

Figures 9-12 show the projected impact of current budget plans on the Forest Service. In real spending terms, the graphs show a decline of over 33 percent in the total Forest Service program. Much of this is due to the elimination of virtually all of the assistance to non-federal forest land owners previously carried out through the State and Private Forestry program, coupled by the gradual decline of program effectiveness due to the impacts of inflation.

The Bureau of Land Management will also take a significant decline if the President's budget is accepted. The jump in budget between 1984 and 1985 represents the money appropriated to allow BLM to feed wild horses and burros, which Congress will not let them dispose of except through a cumbersome, expensive and slow adoption process.

Soil conservation cost-sharing programs would decline precipitously between 1985 and 1986 (if Congress accepts the current recission proposals of the President), then be phased out in 1987. Technical assistance (Shown in Figure 14) will stay fairly steady, but watershed programs will be phased out.

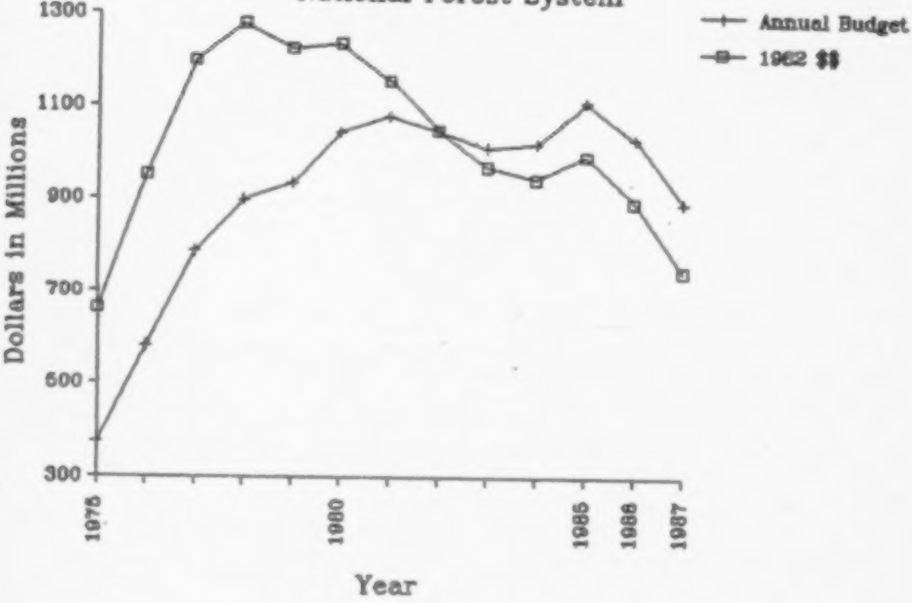
Congressional Prospects

The graphs show what the President proposes, not necessarily what will happen. Congress is constantly changing the scenario: the latest movement is a Senate Budget Committee proposal that greatly reduces defense spending, raises revenues, and lowers the proposed cuts in domestic programs. This has not been gladly received by the White House, so the process is currently at a standstill.

It is reported that the White House would prefer to wait until closer to election time than work on a compromise with the Congress. The likelihood is that the Gramm-Rudman deadline dates will, in fact, need to come (and perhaps go) in order to force the process. The Gramm-Rudman impacts on most natural resource programs would be somewhere in the range of a 20-25% cut between 1986 and 1987. It is not known how such a cut would compare to the President's proposed budget for all programs, but for most the Gramm-Rudman targets would be less of a cut than the Administration proposes.

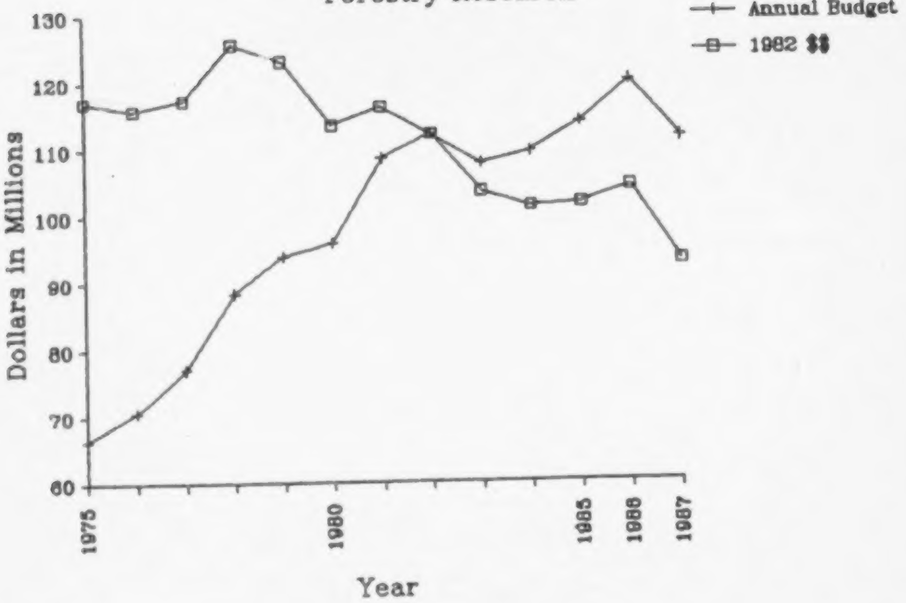
One of the major changes in the Administration's projections could come within the next two weeks, as the deadline for Congressional approval of recission proposals passes. When the President sent the budget document to Congress in February, he proposed that major recissions take place in several conservation programs of the Soil Conservation Service and the Agricultural Stabilization and Conservation Service. If Congress does not approve the cuts — and there is currently no sign that they have any intention of approving them — that money goes back to the agencies some time in mid-April. If that happens, the 1986 spending projections of the budget documents will be off the mark for those programs.

Figure 9.
National Forest System



## Figure 10.

Forestry Research



## Figure 11.

State & Private Forestry

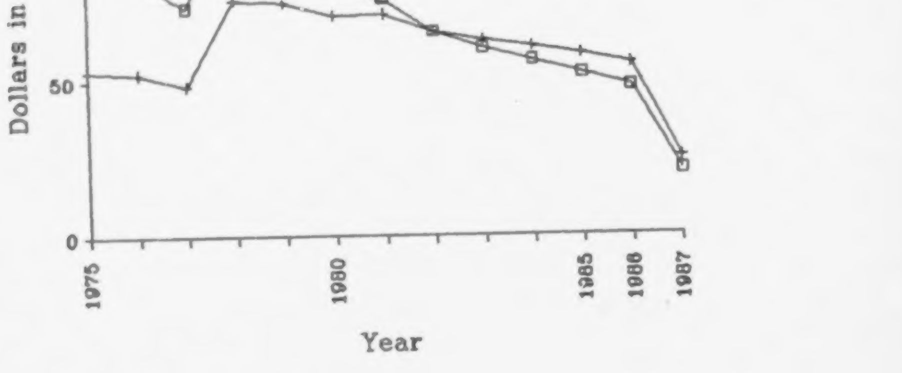


Figure 12.

F.S. Construction

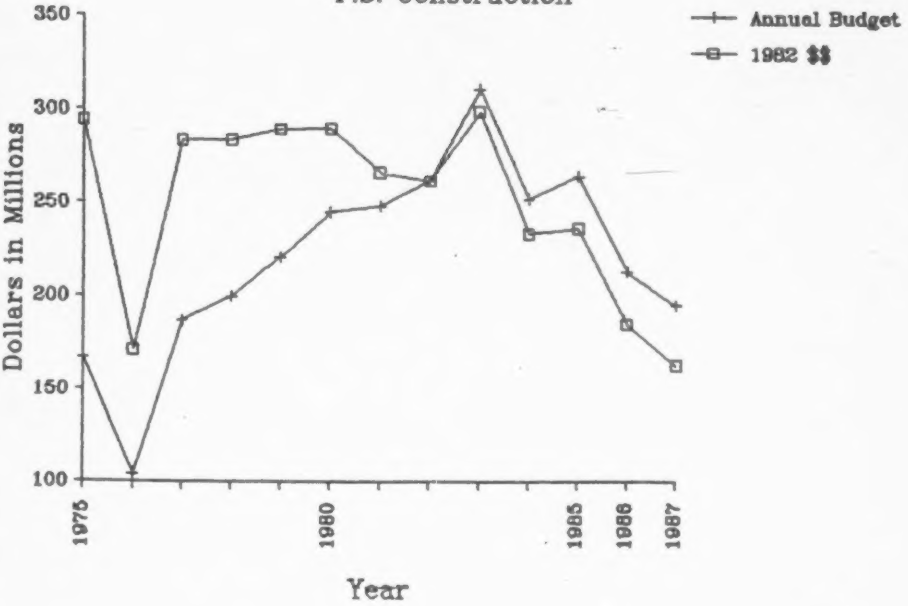


Figure 13.

Renewable Resource Mgmnt.

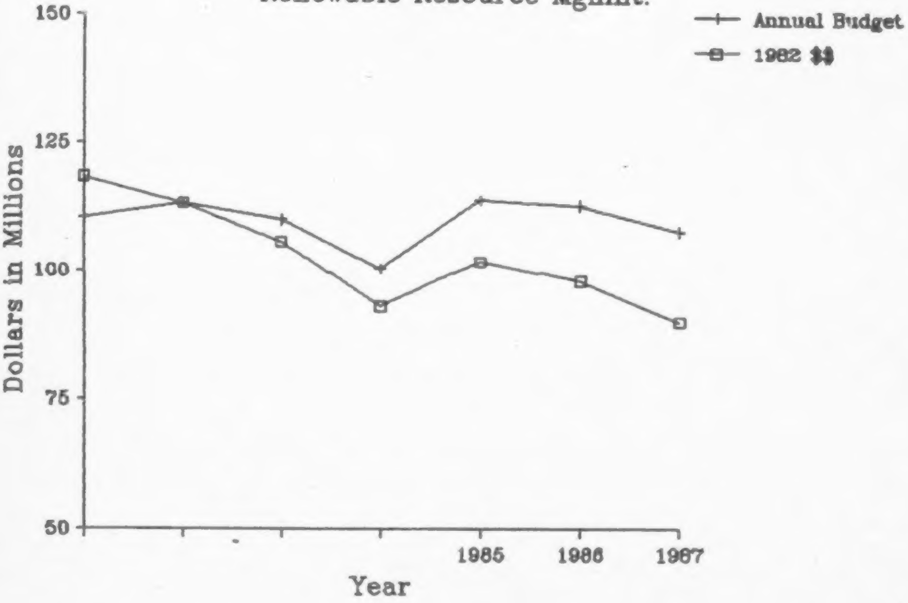


Figure 14.

SCS Conservation Operations

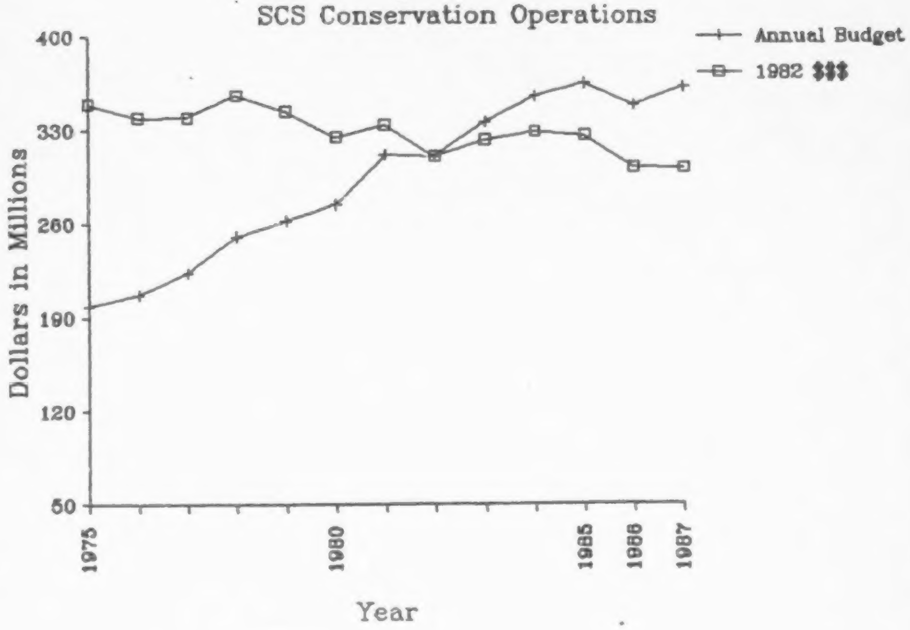


Figure 15.

Resource Conservation & Development

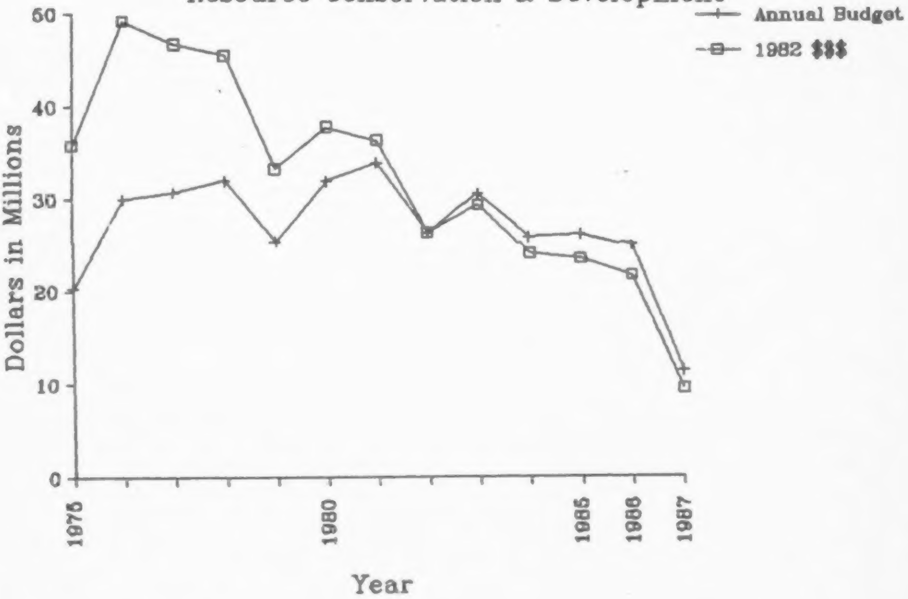
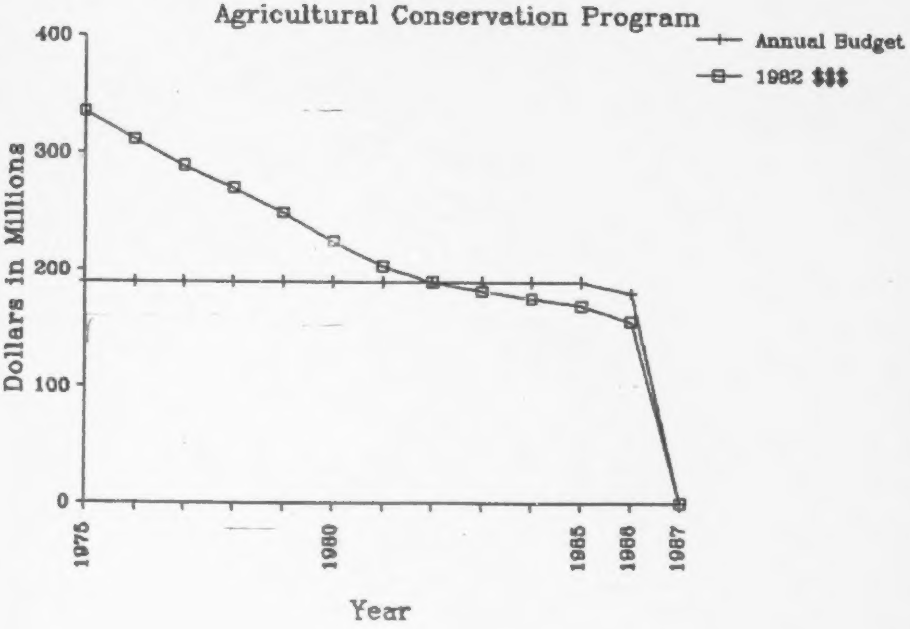


Figure 16.


Agricultural Conservation Program
Annual Budget
1982 $$$
Dollars in Millions
400
300
200
100
0
1975
1980
1985
1986
1987
Year

## NATIONAL ASSOCIATION OF STATE FORESTERS

### STATEMENT OF JOHN BETHEA, CHAIRMAN, NASF LEGISLATIVE COMMITTEE

Senator BURDICK. Our next witness will be Mr. John Bethea, State Forester of Florida, National Association of State Foresters. Did I pronounce that correctly?

Mr. BETHEA. Thank you, Mr. Chairman. I am John Bethea.

Senator BURDICK. Bethea. All right.

Mr. BETHEA. That's all right, sir. That's better than I get it many times. I am the State Forester of Florida. I am here representing the National Association of State Foresters. As I am sure you are aware, the association is made up of the heads of the forestry agencies of the 50 States.

The association would like to thank you and this committee for the support you have given the State and private forestry resource programs through the years and to thank you especially for the consideration in stopping the decline of the recommendation of the funding that is continually put forth by the administration.

You know, there are not many dollars involved here, but there is something that goes far beyond the dollars that the Federal Government provides, and that is Federal leadership. In our opinion, Mr. Chairman, without some Federal involvement in these long-term programs, we will not have the fiber production or the protection of the forest resources and the rural improvements that are needed in this country.

The two most crying needs that the State foresters believe the Nation has at the present time is to ensure that we have a continuing supply of wood fiber from the over 60 percent of small private landowners that own land in this country. About 60 percent of the acreage is owned by these people, and without some national leadership, we don't believe that this will produce the wood fiber that it very well can and should.

One of the programs that this committee addresses is the Forestry Incentives Program cost-share for planting trees and other forest improvements on the private land. Again, what this does, it provides some trees to go into the ground and some forest improvement, but more than that, it shows some Federal concern for the future of wood fiber production in this country. The Forestry Incentives Program needs to be continued so that the projected wood fiber shortfall, just 15 years in the future, will be lessened. The National Association of State Foresters requests approval of a budget of $13 million for the 1987 fiscal year.

#### RURAL COMMUNITY FIRE PROTECTION

As to the Rural Community Fire Protection Program, American people love the outdoors. Now, there is a developing trend to move their homes, and their businesses as well, out of the cities and into rural areas and more natural surroundings. This trend is causing great concern in the rural areas because this area, generally referred to as the urban-rural interface, is something of a "no man's land" when wildfires threaten the lives and property.

Last year, wildfires did extensive damage in the Eastern States from Florida to Maine. Idaho, Nevada, and California were also hard hit. This year, wildfires have been widespread from Texas and Oklahoma to the Virginias and the Carolinas, into Georgia and Alabama.

It is no longer a case of simply protecting the natural resources. Now firefighters are finding themselves in the position of having to protect structures built in close proximity to flammable, native vegetation. More and more homes and businesses are built on lands surrounded by natural fuels. Major loss of life under these circumstances is not only possible, it is inevitable.

The Rural Community Fire Protection program provides financial and technical assistance to train, organize, and equip local rural fire departments. The National Volunteer Fire Council reports that there are about 1.5 million volunteer firefighters in more than 27,000 volunteer fire departments who are responsible for the fire protection of their local communities.

Fire protection for improvements in rural areas will depend more and more on volunteer and small community fire departments. Funds are badly needed to train them in the techniques of fighting wildland fires, as well as structural fires, to prevent increased loss of property and life. To better protect the urban-rural interface, the National Association of State Foresters recommends the 1987 appropriation for RCFP be approved at $3.5 million.

As to the matter of McIntire-Stennis research funding, NASF recommends forest research funding for the universities for 1987 be continued at the current 1986 level in order to develop the needed forest technology in our respective States.

On the Renewable Resource Extension Act funding, targeting is recognized as an effective way to direct limited funds to priority needs. The Renewable Resource Extension Act appropriation is targeted to support the Nation's need for a continuous supply of forest resources. It is a major factor in the transfer of needed forest technology to nonindustrial private forest landowners—who own most of the commercial forest land in the United States—as well as industry and business enterprises involved with management and utilization of the forests.

NASF recommends 1987 funding for this important program at the current level of $2.4 million.

Mr. Chairman, thank you for the opportunity to speak to you today, and I would be glad to answer any questions you may have.

Senator BURDICK. Thank you.

[The statement of Mr. Bethea follows:]

## STATEMENT OF JOHN BETHEA

Mr. Chairman and members of the Committee, I am John Bethea, State Forester of Florida and Chairman of the Legislative Committee of the National Association of State Foresters (NASF).

The members of the NASF are the directors of the state forestry agencies of each state. The primary responsibility of their agencies is to conduct forestry work for the public good on state and privately-owned forest land in their respective states. They work cooperatively with private, federal and other state agencies, organizations and individuals in directing and strengthening all forestry programs within their states.

We welcome this opportunity to appear before you to discuss the importance of the Forest Incentives Program (FIP), funded in the Agricultural Stabilization and Conservation Service budget; the Rural Community Fire Protection Program (RCFP), funded in the Farmers Home Administration budget; McIntire-Stennis Research Funding; and Renewable Resource Extension.

The Committee appropriated $15.75 million for FIP and RCFP last year--$12.5 million for FIP and $3.25 million for RCFP. For 1987, the Administration proposes a zero budget for both programs. NASF recommends $13 million be appropriated for FIP, and $3.5 million for RCFP--a total of $16.5 million.

### FORESTRY INCENTIVES PROGRAM (FIP)

A projected shortage of wood fiber and the need for better fire protection for America's growing rural communities are two issues about which the Association is deeply concerned. Both of these problems touch many Americans today, but millions will be adversely affected in the future unless we effectively address these problems now.

The projections of a shortfall in wood vary but forestry experts agree that by the turn of the century we will probably be facing a demand for wood that exceeds supply by billions of board feet annually. It requires some 10,000 board feet to build the average 1,800-square-foot home, so thousands of homes will not be built unless steps are taken to assure an adequate supply of wood. The shortfall will also have a profound effect on other construction and industries using wood fiber.

Too many private landowners harvest their timber without making the necessary investment to reforest the cutover area. Many lack the capital required for this type of expenditure and are reluctant to borrow money because of the long-term nature of a forestry investment. In most cases, they're faced with the necessity of repaying the loan in a few years, while having to wait 20-25 years for a return on their investment.

The FIP Program, which Congress approved in 1974, helps offset the obstacles to long-term investment in forestry which include high interest rates, long-term cash commitments and protection of plantation investments. Unfortunately, the situation has reached the point where we not only need cooperative programs like FIP, but also need tax credit incentives and technical assistance to encourage the 7.8 million owners of private nonindustrial forest land to plant their unproductive acreage in trees for the future. These private landowners own or control nearly 60 percent of our domestic commercial timberland, and account for about 45 percent of the roundwood timber supply. By 2030, these lands are expected to provide almost 60 percent of the total roundwood supplies. The USDA Forest Service estimates that some 1,000,000 acres a year in the South alone are reverting from productive pine timber to brush and low quality hardwoods. The Forest Service reports that the major cause is inadequate or nonexistent regeneration following harvest.

The Conservation Reserve Program and the Agriculture Conservation Program do have an effect on forestry, but their primary mission is to conserve soil and water. While they will have long-range benefits on forestry, they will have no effect on many acres of forest lands that have been harvested and then left idle.

The Packwood Bill that provides for a 10 percent tax credit and allows for the amortization of the remaining reforestation expenses is needed. It does not, however, help the small landowner who needs funds to plant trees and perform the other work needed to grow timber.

The Forestry Incentives Program needs to be continued so that the projected wood fiber shortfall, just 15 years in the future, will be lessened. The National Association of State Foresters requests approval of a budget of $13 million for the 1987 fiscal year.

## RURAL COMMUNITY FIRE PROTECTION (RCFP)

The American people love the outdoors. Now there is a developing trend to move their homes--and their businesses as well--out of the cities and into rural areas and more natural surroundings. This trend is causing great concern in the rural areas because this area--generally referred to as the urban-rural interface--is something of a "no man's land" when wildfires threaten lives and property.

Last year, wildfires did extensive damage in the eastern states from Florida to Maine. Idaho, Nevada and California were also hard hit. This year, wildfires have been widespread from Texas and Oklahoma to the Virginias and the Carolinas, into Georgia and Alabama.

It is no longer a case of simply protecting the natural resource. Now firefighters are finding themselves in the position of having to protect structures built in close proximity to flammable, native vegetation.

This problem has existed throughout the West and especially in California for many years. Now all up and down the Eastern Seaboard from Florida's palmettos to Maine's pine forests, structural fire losses are increasing dramatically as more homes and businesses are built on lands surrounded by natural fuels. Major loss of life under these circumstances is not only possible, it is inevitable.

There doesn't appear much likelihood of this trend being reversed, so fire management techniques must be changed in order to suppress the small, fast-moving single and multiple fires that are the main threats to the people and structures in these areas. But these changes must be made on a nationwide basis.

Fire personnel who are accustomed to fighting wildland fires are generally inadequately prepared to fight structural fires. Municipal fire departments usually lack the training and equipment necessary to fight wildland fires. The special nature of fires in the urban-rural interface frequently forces firefighters to adopt suppression tactics for which they are neither trained nor equipped.

The Rural Community Fire Protection Program provides financial and technical assistance to train, organize and equip local, rural fire departments. The National Volunteer Fire Council reports there are about 1.5 million volunteer firefighters in more than 27,000 volunteer fire departments who are responsible for the fire protection of their local communities.

Fire protection for improvements in rural areas will depend more and more on volunteer and small community fire departments. Funds are badly needed to train them in the techniques of fighting wildland fires as well as structural fires, to prevent increased loss of property and life.

To better protect the urban-rural interface, the National Association of State Foresters recommends the 1987 appropriation for RCFP be approved at $3.5 million.

## MCINTIRE-STENNIS RESEARCH FUNDING

Underlying the forest development and protection responsibilities of the state forestry agencies is the need to generate new technology and methodology which can increase the efficiency of forest management and development, and reduce loss of forest values through insect and disease and fire.

The state forestry agencies depend primarily on the state universities and the U. S. Forest Service for the research and technology support base. While certainly many research needs are national in scope and deserve a national approach, the individual schools play a major role in emphasizing the research and technology needs in their individual states and regions.

We are aware that the total support for the federal/state forestry research has decreased significantly in inflation-adjusted dollars concurrently with increasing needs for more sophisticated forest and forest products technology. The Association is highly concerned about this trend which adversely impacts on the effectiveness of state forestry agencies to bring about cost-effective forest development and protection technology.

NASF therefore recommends forest research funding (McIntire-Stennis) for the universities for 1987 be continued at the current 1986 level in order to develop the needed forest technology in our respective states.

## RENEWABLE RESOURCE EXTENSION

Targeting is recognized as an effective way to direct limited funds to priority needs. The Renewable Resource Extension appropriation is targeted to support the nation's need for a continuous supply of forest resources. It is a major factor in the transfer of needed forest technology to nonindustrial private forest landowners (who own most of the commercial forest land in the United States) as well as industry and business enterprises involved with management and utilization of forests.

The NASF recommends 1987 funding for this important program at the current level of $2.4 million.

## Master Marketers' Association of America

### STATEMENT OF RALPH BEAL

Senator Burdick. Our next witness is Mr. Ralph Beal, who is here representing the Master Marketers' Association of America, and is standing in for Mr. Robert Bor, who could not be present.

Mr. Beal. Thank you very much, Mr. Chairman. Mr. Chairman and distinguished members of the committee, my name is Ralph Beal. I am president of my own crop insurance agency, headquartered in Texas, and I am here today representing the Master Marketers' Association of America. We are a member of the private sector who sell and service federal crop insurance to the Nation's farmers.

Our group appeared before this committee a year ago, and our concerns for the direction and general purpose of the crop insurance programs are growing.

Of utmost concern to us are the farmer and his acceptance of the program. The intent of the 1980 amendments to the Federal Crop Insurance Act was to provide an affordable program in lieu of a disaster program, thus assuring survival of the farmer and continual production of food and fiber for the Nation. The wisdom of Congress at the time established a formula whereby the farmer paid approximately 70 percent of the insurance cost with the Government assisting with 30 percent of the cost. With this formula, Congress and the taxpayer realized a substantial savings over the disaster programs that existed at that time.

We realize today there is a debate to shift the entire cost of the federal crop insurance program to the farmer. We cannot overemphasize to you the disastrous effect this would be on program participation with the current farm economy. Many of today's farmers are literally on their knees and simply cannot pay additional costs.

We are vitally concerned over the present direction of the crop insurance program and its inability to progress toward original participation goals.

Let me take a moment to summarize the administrative costs of Federal crop insurance since passage of the 1980 act. In 1981, the program had an administrative cost of $79,968,181, with premiums of $376,661,460. By contrast, in 1985, the crop insurance program had administrative costs of $199,604,000 and produced $440,301,000 in premiums.

This indicates that in 4 years FCIC has produced 17 percent more business at 250 percent more cost. This does not represent the 1980 expectations of Congress nor those of the Master Marketers' Association of America.

The committee should be aware that extensive studies have been performed by various Government and private agencies, such as GAO, OIG, Ashby-Armstrong, the House Appropriations chairman, and others, which clearly show the cause of such increased costs. We urge the committee to review this available data and put a halt to the reasons contributing to unnecessary administrative expenses.

Another matter we want to address to the committee is the actual production history [APH] program and the burden that it has placed upon our companies and our agents and farmers. We cannot begin to measure the cost of this program due to its complexity. We do know that sales for spring crops ended April 15, and many farmers do not yet know their coverage and premiums for insurance, due to the excess loads of paperwork being processed by FCIC.

In testimony before the House a few days ago, an insurance agency introduced the amount of paperwork it took to insure a father-son farming operation in Weld County, CO. It was unbelievable. If my memory serves me right, it took 214 separate pieces of paper involving some 126 different Government forms to do the job. The agent summarized it by saying it took one piece of paper to insure every 7.5 acres and one form for every 12.7 acres in his example.

This program not only is expensive, but of equal concern to that, it is severely hampering participation in the crop insurance program. Agents and farmers alike do not understand nor have the time to complete the necessary forms and requirements to participate in the program.

This, coupled with the constant changes crop insurance management has required of the program, have created confusion among farmers, agents, and even lenders and has deterred program participation. We do not believe this is the intent of Congress.

### DUAL DELIVERY SYSTEM

As this committee is aware, there exist two delivery systems for distributing Federal crop insurance to the farmer. We ask that FCIC be required to treat both systems equally. Equal treatment will ensure greater program participation, which we believe is the intent and desire of this committee and others.

But this committee must realize that last year the FCIC management recommended the elimination of one of the delivery systems represented by private agents and Master Marketing companies. Unfortunately, this effort produced confusion, and farmer participation suffered. Indeed, this effort by FCIC management and its board of directors is continuing today. By placing requirements such as State licensing on agents, by attempting to consolidate insurance units into one per county or State, and by promoting only one side of the delivery force, FCIC is actively ensuring the failure of the program.

We would hope that the committee and others would pay close attention to independent studies that we previously have mentioned to ensure fairness and equal treatment to each delivery system so that this vital program can begin to move forward toward its real purpose of providing crop protection to all farmers on all crops.

Let me conclude by saying that we are certain that the committee members are familiar with many of the problems we have addressed here today. These problems are severe and should be dealt with immediately.

On the one hand, none of us should overlook the potential promise of the Federal Crop Insurance Program. Farmers and lenders alike look to it as a valuable tool to assure survival in the event of a disaster. As one lender put it, and I quote, "Federal crop insurance is a great idea, but the paperwork burden has made it a nightmare to participate in the program."

It is the feeling of the Master Marketers' Association that the existing problems with the crop insurance program and management can be corrected. We remain confident that by working with all members of the private sector, FCIC can achieve the intent of the 1980 legislation.

But we cannot put additional hurdles in front of the success by removing the premium subsidy that now exists, by continuing with the tunnel vision management, by permitting multiperil companies to pirate business by paying higher commissions to agents than the Master Marketing companies receive in total, and by not controlling the loss adjustment of MPCI companies, or by allowing continued harassment of private agents by FCIC and MPCI, forcing them to transfer their business to the private companies.

Today's farmer simply does not have the money and financial ability to bear the entire expense of this valuable tool or the patience to complete the excessive amounts of paperwork necessary to participate. And today's agent cannot operate in an atmosphere of unfair competition, harassment, and tons of paperwork.

I would be glad to answer any questions that you have.

### EFFECTS OF ELIMINATING SUBSIDY

Senator COCHRAN [presiding]. Mr. Beal, we appreciate your being here, and your testimony about the Federal Crop Insurance Program.

I, too, am worried about whether or not we will continue to see participation by farmers if we escalate the costs of the premium too high. There is some point at which the farmer is just not going to buy; he's just going to take the chance and leave it up to the Lord and Mother Nature and take the risk himself.

Mr. BEAL. That's right.

Senator COCHRAN. And that is going to be a very unfortunate thing, because disasters are inevitable, and I am afraid that what will happen is that farmers will turn to the Congress for another disaster assistance program of some kind. Then Congress will respond, and there will go the crop insurance program, I think, right out the window.

So we run a big, big risk if we push that premium cost up too high, and we will do that if we remove large amounts of the subsidy. I don't know if you've got a magic answer. There has to be some cutback in the cost of Government programs generally, or either we're going to have to raise some revenue to pay for it in other ways.

How much do you think could be removed of this subsidy without running the risk of eliminating participants?

Mr. BEAL. Mr. Chairman, I believe that if we intensify our program toward the farmer, we can remove the subsidy in the future. I couldn't give you a definite period of time. I think, though, over a 4- to 5-year period of time, this subsidy could be removed if we address the problem of farmer participation in the program. The reason we have a failure of farmer participation is the excessive problems that we've mentioned here, such as the paperwork.

For the farmer—I am speaking now as a farmer myself—production guarantee is very important, but a dollar guarantee of my cost of my investment is also very important, and Federal crop insurance has the ability to develop such a program. If we can correct this train of thought in management, this type of program can be developed.

Senator COCHRAN. Well, I appreciate your being here and your testimony. Tell Bob Bor hello for me. He was listed as a witness. We're sorry he's not here. But you certainly have done an excellent job. Thank you for your testifying.

Mr. BEAL. Thank you.

Senator COCHRAN. Graham Purcell is here with you. We're always glad to see him.

Mr. PURCELL. Mr. Chairman, Mr. Bor, as you know, is my law partner. I would have the record show he's my law partner. He just gave me a call. He's hung up on CFTC matters on the House side. I haven't even met this gentlemen. I was trying to determine who he was so I could come up and sit with him. [Laughter.] Mr. Bor would have been here, but I appreciate your listening to Mr. Beal.

Senator COCHRAN. Thank you very much, Mr. Purcell.

You've got a good fellow on your side, Mr. Beal.

Mr. BEAL. Thank you.

Senator COCHRAN. Thank you.

## CONGRESSIONAL WITNESS

## STATEMENT OF HON. ALBERT GORE, U.S. SENATOR FROM TENNESSEE

Senator COCHRAN. Our next witness today is the distinguished Senator from Tennessee, Senator Albert Gore, Jr. We are very happy to have Senator Gore testify before our committee—even though I don't know what he's going to talk about. [Laughter.]

Senator GORE. Agriculture extension. [Laughter.]

Senator COCHRAN. You may proceed.

Senator GORE. Thank you, Mr. Chairman.

You and I have talked privately about this on prior occasions once or twice, and I am comforted by the fact that you and other members of this subcommittee are such strong supporters of the Agricultural Extension Service.

I come here today to express my strong opposition to the administration's plan to cut the Agricultural Extension Service budget by 59 percent.

I think you can go through the entire proposed budget and have a hard time coming up with any particular proposal that makes less sense than this one. The Agricultural Extension Service is one of the great success stories of our Government. In fact, we get visitors from all over the world every year trying to figure out how they can create their own agricultural extension service—it works that well. And yet, this proposal would result in the elimination of 1,000 county Extension offices and close them up, eliminating 8,000 Extension jobs.

Now, Mr. Chairman, the Extension Service does such a good job, and the county agents are so essential to agricultural productivity that, as I said before, it makes no sense at all. County agents provide valuable services for farmers in rural communities everywhere. Such a massive cut would mean the end of dozens of important farm information programs, pest management, farm safety, urban gardening, financial management, 4-H Programs, and county agents.

Far from streamlining the service, the administration would practically put it out of business. It really is hard to imagine a more shortsighted attitude.

Programs like 4-H, for example, train future farmers who will some day be called upon to feed America and much of the world. And the Extension Service, with its Federal, State, and local cooperation and its network of advisory councils, is able to anticipate and respond to new conditions and problems, whether national or local in magnitude. Right now it's giving top priority to working with farm families to help them survive the current farm crisis and, in time, return to profitability.

## VOLUNTEERS ARE KEY TO EXTENSION

Here is an interesting point, Mr. Chairman. One measure of the value of the Extension Service and the high regard in which it's held by the citizens in this country is the huge number of people who volunteer. It represents the work of almost 3 million volunteers who contribute their time, expertise, and other resources in the spirit of cooperation and helping others that exemplifies the best values of this country. These volunteers also become effective leaders for their communities, organizations, and government.

Now, 4-H is another program that would be eliminated by this proposal. And I don't know about your own experience, Mr. Chairman, but I was in 4-H, and in the little community where I grew up in Tennessee, most of the youngsters from farm families participated in the 4-H program.

It's an incredibly valuable program. There are now over 170,000 4-H members in Tennessee alone, and I dare say there are almost that many in Mississippi. These programs help prepare young people for the challenges of life, building character and teaching values such as responsibility, compassion, and striving for excellence.

Mr. Chairman, I have remarks about many of the other effects of this proposal, which I will ask your permission to put in the record in their full form. But for this oral presentation let me just very briefly mention a few of the valuable programs that would be eliminated in my home State if this proposal was not rejected: Integrated pest management; cotton pest management; pesticide applicator training—one of my very best friends in the world almost died because of one of the licensed restricted-use pesticides—and although there was some controversy about that program in the beginning, I think that most farmers believe that it makes some sense at this point; urban gardening; nutrition education; farm financial management; and stress management programs. These are only a few of the ones that would be eliminated.

Mr. Chairman, I have introduced a resolution in the Senate to express the wishes of the Senate that the Agricultural Extension Service budget be restored. But the real action, of course, will take place right here in this subcommittee.

We're not asking for no cuts. We are asking that we have our fair share of cuts for agricultural extension. The Gramm-Rudman-Hollings cuts would be equally applied to almost all agencies, and we believe we could survive with that.

But in closing, Mr. Chairman—and to my distinguished senior colleague from Tennessee, Senator Sasser, I will repeat—that I am comforted by the fact that I know members of this subcommittee are such strong supporters of the Agricultural Extension Service, and I urge your favorable consideration of this testimony and urge your rejection of the administration's proposal to virtually eliminate the Agricultural Extension Service.

### 4-H CLUBS

Senator COCHRAN. Senator, we appreciate your coming by the committee and giving us the benefit of your thoughts and suggestions about the Extension Service. I, too, am a very strong supporter of the work of the Extension Service generally.

You singled out the 4-H Clubs and said that if this budget request is approved by the committee, it will eliminate the 4-H Clubs. I was worried about that, too, and when we had the Extension Service before the committee, I went into that with them. We had Dr. Mary Nell Greenwood, as I recall, who is the head of the Extension Service, before the committee, along with others that day from the Department.

The 4-H Clubs are not really supported directly by an appropriation from the Congress. We do not appropriate, for instance, in our bill a specific amount for 4-H Clubs. What we do is provide an appropriation for the Extension Service, and even at the Washington level there is no decision made as to the exact amount of money that is to be allocated for the 4-H Clubs around the country.

Each State, out of its State extension service budget, decides the priorities that exist in that State within the extension service activities, and then they make an allocation for 4-H Club support or other activities. The 4-H Clubs are now run mostly by volunteer leaders who give of their time, as you observed, to help organize and guide the student members of the 4-H Clubs in their activities.

It's a wonderful organization. I was honored a few years ago as a distinguished alumnus of the 4-H Clubs at their national convention in Chicago. I was a member, and I think they have one of the best programs of any organization in the country.

I don't think this committee is going to turn its back on the 4-H Clubs or the programs of the 4-H Clubs. I think we will continue to support the Extension Service and make sure that funds made available to the Extension Service are used to continue to help support the 4-H Clubs. But I don't think we're going to see the 4-H Clubs eliminated, and this Senator certainly isn't going to stand for it, and I am glad to know we can count on your help, too.

Senator Sasser.

Senator SASSER. Well, Mr. Chairman, I would just like to welcome my distinguished colleague here before the Agriculture Appropriations Subcommittee today and say that I certainly welcome and applaud his interest in the Extension Service and the 4-H Clubs. I know that has been a longstanding interest of his, and I think, if I am not mistaken, he may have been a former member of the 4-H Club on one occasion—I won't ask him what his project was.

Senator GORE. Beef cattle.

Senator SASSER. Beef cattle. But in any case, just let me say that we have fought this battle in the Budget Committee and won it, and prevented the administration's proposed cuts in the Extension Service from becoming a reality. It was fought on the Senate floor and in the budget passed by the Senate. These cuts were deleted, or at least the administration's request was not gone along with. And I am confident that this committee is not going to, at this late hour, come forward, at least under the leadership of our chairman here, and go along with the administration's efforts to cut the Extension Service to 4–H Clubs.

I am delighted to see Senator Gore here this afternoon.

Senator GORE. Well, let me just say in response that I mentioned in my statement that I am well aware that the real action is right here in this subcommittee and in the Budget Committee, and I am well aware of the good fight you all have fought year by year to preserve these programs.

When the budget proposal came out this year, as one Senator I found myself talking to farmers and others at open meetings in my home State who were extremely concerned about what was going to happen this year. And in some small way, I tried to ring the alarm bells and try to rally the support, but always remaining fully aware of the fact that the bulwark of support was right here in the subcommittee. As I also said in my statement, I am much comforted with the fact that you all serve on this subcommittee and that you are such strong supporters of 4–H and Extension and the other programs here.

I appreciate your time and courtesy in letting me make a statement here.

Senator COCHRAN. We're glad to have you here.

Senator GORE. Thank you.

Senator COCHRAN. We have second bells ringing on a vote on the floor, so our subcommittee will be in recess until we vote. We will resume in about 10 minutes.

[A brief recess was taken.]

[The statement of Senator Gore follows:]

## STATEMENT OF SENATOR GORE

Thank you, Mr. Chairman, for giving me the opportunity to testify here this afternoon.

Mr. Chairman, I would like to express my strong opposition to the Administration's plans to slash 59 percent of the Agricultural Extension Service budget. I consider the Administration's proposal an unjust and unwarranted attack on one of the government's most effective programs.

If the Administration has its way, budget cuts could force 1,000 county extension offices to close and eliminate 8,000 extension jobs. As you know, the Extension Service is one of the great success stories in rural America. County agents provide many valuable services for farmers and rural communities everywhere. Visitors flock from countries all over the world to see its programs at work.

Such a massive cut could mean the end of dozens of important farm information programs -- pest management, farm safety, urban gardening, and financial management, as well as the 4-H and County Agents. Far from streamlining the Service, the Administration would practically put it out of business.

It is hard to imagine a more short-sighted attitude. Programs like the 4-H train future farmers, who will someday be called upon to feed America and much of the world. And the Extension System, with its federal, state, and local cooperation and its network of advisory councils, is able to anticipate and respond to new conditions and problems whether national or local in magnitude. Right now it is giving top priority to working with farm families to help them survive the current farm crisis and, in time, return to profitability.

One measure of the value of Extension and the high regard in which it is held by the citizens of this country, is the huge number of people who volunteer to serve in a wide variety of extension programs. A recent study indicates Extension has a network of nearly 2.9 million volunteers who contribute their time, expertise, and other resources in the spirit of cooperation and helping others that exemplifies the best values of this country. These volunteers also become effective leaders for their communities, organizations, and government.

Many of the Extension volunteers serve as 4-H Club leaders, helping to develop the most important resource of this country -- our youth. Millions of Americans have taken part in 4-H, and there are now over 170,000 4-H members in Tennessee alone. These programs help prepare young people for the challenges of life. They build character and teach values such as responsibility, compassion, and striving for excellence. These clubs are active in cities as well as in rural commmunities, helping youth who will go on to become leaders in many different professions.

The Cooperative Extension System, operating in more than 3000 counties nationwide, provides leadership in adapting and transferring science and technology in agriculture, forestry, and nutrition from America's laboratories and universities directly to America's farmers, families, and communities. Extension tailors appropriate technology to site-specific conditions, maximizing the value of research and improving the efficiency of American agriculture.

Extension is a vital link in the implementation of new farm programs, such as those in the 1985 farm bill. One of these is the conservation reserve program, which has a goal of retiring over 40 million acres of highly erodible cropland from production. Soil erosion is a serious problem in this country with over 5 billion tons of topsoil being lost each year, which not only reduces productivity but causes water pollution and the siltation of reservoirs. The Extension Service will assist farmers by providing information on the new conservation program and help in choosing available alternatives. It will also help farmers in implementing reduced input and operating cost technologies, and in crop and market diversification.

Though I recognize the need to reduce the federal budget deficit, it is irrational to single out the Extension Service, and agriculture in general, for such severe cuts. Agriculture, after all, is vital not only to our economy but to our defense.

Extension programs provide benefits to this nation which far exceed what they cost the federal government. Through the transfer of scientific knowledge they have greatly improved the efficiency of American agriculture and the nutrition and health of rural families.

Consider some of the valuable programs that could be eliminated in my home state:

1. Integrated pest management - more than 3,100 growers of soybeans, grain sorghum, and tomatoes would suffer an estimated total loss of $1,300,000. A program that encourages judicious use of pesticides would also be lost.

2. Cotton pest management - about 1,000 farmers would be adversely affected with the cost of production rising an estimated $1,400,000. Damage to the environment could also result from indiscriminate use of pesticides.

3. Pesticide applicator training - farmers would be unable to get the training required for them to buy and use restricted-use pesticides. Commercial applicators would not get the training to prepare them for licensing exams. There would likely be an increase in illegal and unwise use of pesticides.

4. Urban gardening - 3,500 families in Memphis would no longer be served. The value of production is about 12 times the cost of the program.

5. Nutrition education - over 8,000 low-income families and about 19,000 youth would no longer receive education about nutrition and food management.

6. Enrollment in 4-H would be reduced -- perhaps by as many as 40,000 young people.

7. Sharp reductions in the farm financial management and stress management programs for farm families in crisis.

8. Nearly all paraprofessional positions and over 100 professional positions (county agents and agricultural and home economics specialists) would be eliminated.

9. Renewable resource development activities would fall to a very minimal level.

Farmers and rural families across the country are concerned about the Administration plan. At one of my open meetings in East Tennessee recently, a group of farmers presented a petition asking my help in saving the Extension Service. And hundreds of people have contacted me individually. In rural areas, extension programs are a vital part of family and community life. The

Administration's attack on the Extension Service is causing additional stress at a time when many farm families are already suffering greatly and struggling to survive.

I have introduced a resolution in the United States Senate to restore the Agricultural Extension Service budget at its current level, less the across-the-board reductions required by the Gramm-Rudman-Hollings legislation. This compromise will allow us to continue to make progress in reducing the deficit while recognizing the needs of proven Extension Service programs.

Agriculture is the backbone of our economy. This is no time to punish farmers -- and future farmers -- by cutting programs that work.

Mr. Chairman, I would like to express my strong opposition to the Administration's plans to slash 71 percent of the current Forest Service' appropriation for Job Corps Centers, in program year 1987 (July 1, 1987 to June 30, 1988). This is an unjust attack on one of the federal government's most effective programs for improving the long-term employment prospects of thousands of disadvantaged youth.

The Administration's cuts would force the closing of many of the 18 Job Corps Civilian Conservation Centers providing basic education and job training to young men and women who might otherwise end up on welfare or in trouble. The main purpose of the Centers is to produce graduates who are able to find productive jobs, re-enter school, or join the military. In addition to acquiring job skills, participants perform millions of dollars worth of conservation and construction work every year for the federal and local governments.

In my home state, the Jacob Creek Job Corps Center has enjoyed a close relationship with the local communities, providing numerous improvements throughout the region. These communities are very supportive of the program, and believe it makes sound use of tax dollars by providing these services while training youth for a more productive life.

The Forest Service Job Corps Centers have consistently achieved a high employment success ratio with their graduates. There are now nearly 8,000 youth in these Centers. It is much more cost-efficient, and humane, to train these disadvantaged youth to find productive work than to abandon them to situations where they would have very poor employment prospects and likely end up on long-term government assistance.

Our youth are the future of this country. It would be foolish indeed to cripple a program which is such a sound investment in that future.

## Beet Sugar Development Foundation

### STATEMENT OF JAMES FISCHER

Senator Cochran. The subcommittee will please come to order. We will continue our hearing, reviewing the request for appropriations for the Department of Agriculture and related agencies for fiscal year 1987.

Our next witness on the agenda is Mr. James Fischer, who is representing the Beet Sugar Development Foundation.

Mr. Fischer, if you would come forward, as you probably have heard earlier in the day, we have tried to limit the oral presentations to the committee to 5 minutes each because of the large number of witnesses who have requested an opportunity to be heard. So if you could keep your presentation within that time limit, we would appreciate it very much. Welcome to the committee.

Mr. FISCHER. Thank you, Mr. Chairman. I will recognize the time limitations. I represent the Beet Sugar Development Foundation. Mr. Carter here is the president of the United States Sugarbeet Association.

My group is sponsored by all the beet sugar companies in the United States and all those beet sugar seed companies that are supplying seed to the growers. This testimony is supported by all those companies and also the growers of sugarbeets in the United States.

The purpose of this presentation is to call your attention to a very serious disease that has invaded the United States, particularly in California at this time. It is called Rhizomania. The disease has been very devastating to Western Europe and in the past has caused sugarbeets to be excluded from the crop program in Italy.

We are scared as the devil over it, and presently it has affected 26,000 acres in the State of California that we no longer can raise sugarbeets on. We have found the carrier of the disease in a number of our Western States. The carrier is the Vector 4A virus, and it is the most devastating thing that we have ever encountered as far as decreasing the availability of producing a good crop of sugarbeets and, therefore, reducing the economic return to the agricultural communities of the 14 States in which we raise sugarbeets.

We first noticed this in California in 1983. It is carried by runoff water, people walking through the crops, machinery moving from one area to another, and, therefore, the probability of this expanding to many areas in the United States is certainly something to be reckoned with.

The early work by the U.S. Department of Agriculture, with emergency funds provided by the Agricultural Research Service, has established the background on which now we can launch a very, very effective research program without substantial amounts of money, and we think that the expertise of these people can indeed rather quickly produce several different approaches whereby this disease can be controlled.

We are asking for $400,000 in additional funds annually for the next several years, with which we can engage two particular scientists, including one who can relate to the area of biology and management of soilborne field crops. One reason we are particularly interested in this is that it appears that this has the possibility of affecting particularly the grain crops. We have evidence of that now, and certainly we don't want to have this devastating disease affect those crops in the Western portion of the United States, particularly.

The other professional we are requesting to be funded is a virologist biochemist who can investigate the biochemical and biological mechanisms that are associated with development of resistant varieties of sugarbeets.

Our Beet Sugar Development Foundation operates under a broad form of cooperative agreement with the U.S. Department of Agriculture, and we and the growers have supplied substantial funds in support of the USDA program, with a significant amount going into the

USDA program at Salinas, CA, where we are suggesting these funds be placed.

So this represents a joint effort, Mr. Chairman, and I think it is the President's wish that industry and the Government join hand in hand in research programs. And that's what we've been doing, and we intend to continue this. We will appreciate your consideration of this request.

### SOURCE OF FUNDS

Senator COCHRAN. Well, I appreciate your testimony and your bringing to the attention of the subcommittee this very serious problem. As you point out, Mr. Fischer, this is a relatively small amount you are requesting for this research effort. I hope we can accommodate your request in some way and ensure that the work that has already begun in this area is continued.

You point out that over the past 2 years we have made available $50,000 through the Agricultural Research Service and that a like amount, as I understand it, has been provided by your foundation. I presume those funds come from sugarbeet growers themselves.

Mr. FISCHER. And processors.

Senator COCHRAN. And processors.

Mr. FISCHER. Yes.

Senator COCHRAN. So they are paying their share at this point. Will their contributions continue, or will this be just something that you will want to turn over to the Government completely now?

Mr. FISCHER. No, sir; we will continue it. We have it budgeted already for this fiscal year and intend to continue it. No; we know our obligation in this, and we like this partnership of the USDA and our industry.

Senator COCHRAN. Well, thank you so much for discussing this with the committee, and we will try to work with you on it. Thank you.

Mr. FISCHER. Thank you. We will appreciate it.

Senator COCHRAN. Thank you very much.

[The statement of Mr. Fischer follows:]

## STATEMENT OF JAMES FISCHER

Rhizomania is not the latest teenage dance craze. Nor is it a musical rock group.

Rhizomania is a devastating plant disease affecting sugarbeets but capable also of infesting numerous other crops. It first manifested itself in this country in California in 1983. At that time 33 fields involving 2600 acres of sugarbeets were discovered. In 1984, an additional 6200 acres were essentially destroyed by the virus. During 1985 an additional 17,800 acres have been shown to be infested or lost. This comprises a total of 26,600 acres and over 300 fields that no longer can be used for production of sugarbeets. During 1985 the disease was also found in Texas.

First discovered in Italy, Rhizomania has spread rapidly into many European countries. The disease is caused by the Beet Necrotic Yellow Vein Virus (BNYVV) and is transmitted to the beet by a root-invading soil-borne fungus Polymyxa betae. It can be transmitted easily by tailing waters, agricultural equipment, dust, --even clothing worn by agricultural workers. The fungus vector, P. betae, has been found as far north as Alberta, Canada and as far south as the Mexican border and, although extensive searches have not yet been made, it has been uncovered in Nebraska, Colorado and Texas.

The vector and the virus have the potential of affecting sugarbeet production in any of the present 14 states where sugarbeets are grown. We are here today seeking additional funding for basic research aimed at controlling this industry-threatening plant virus.

Research on Rhizomania is in its infancy. It has been learned that fumigation of the soil with methyl-bromide can destroy the vector, but the cost is prohibitive. Since reinfestation of the treated soil layer is unavoidable, disinfection is ineffective. Negative results have been observed with fungicides.

Breeding of tolerant varieties against Rhizomania began in

Europe in 1978. Some success has been observed, enough to suggest that concerted breeding efforts be made by every affected agency.

A complex of virus diseases of grain (wheat, barley, oats and rice) occur in Eastern U.S. and in other parts of the world. These diseases have similarities to Rhizomania, thus Rhizomania-like diseases may attack a large number of crops, species including grains, sugarbeets and vegetables.

In 1984, and again in 1985, the USDA-ARS provided $50,000 of emergency funds to initiate exploratory research. A similar effort has been made by the United States Beet Sugar Industry, processors and growers. Enough information has been collected to determine the direction that research efforts must take.

It is proposed that the Rhizomania research initiated at the USDA Agricultural Research Station at Salinas, California be expanded to embrace fundamental research on the disease and related diseases. An additional $400,000 is urgently required for use as follows:

$50,000 to replace the emergency funding supplied by the ARS in 1984-85;

$175,000 to reinstitute a recently terminated CRIS unit so that it may continue research in the area of Biology and Management of Soil-Borne Field Crop and Vegetable pathogens; and

$175,000 for a new professional position (Virologist-biochemist-genetic engineer) to investigate the biochemical or molecular biological mechanisms of arthropod and soil-borne viruses as related to resistance and immunity.

This request is being made by the Beet Sugar Development Foundation whose members include the U.S. beet sugar processors and domestic producers and suppliers of sugarbeet seed. The request is wholeheartedly endorsed by all U.S. grower associations.

Under a broad-form cooperative agreement between the USDA and the Foundation, supplementary research funds have been made available to USDA-ARS researchers for the past 40 years. It is our intent for the Foundation to continue at least the present level of financial involvement which presently is in excess of $300,000 annually.

Mr. Chairman and Members of the Committee, Rhizomania is a very serious threat to a basic U.S. agricultural industry which operates in 14 states. Moreover, any fallout from the disease could threaten a large number of other crops on which this country depends.

We believe that a relatively small investment for accelerated research at this time will return substantial future savings.

Thank you for this opportunity to appear.

## NATIONAL RURAL WATER ASSOCIATION

### STATEMENT OF JIM SWEENEY

Senator COCHRAN. Our next witness this afternoon is Mr. Jim Sweeney, who is representing the National Rural Water Association.

Welcome, Mr. Sweeney.

Mr. SWEENEY. Thank you. The last time I got before one of these committees, I tried to do it off the cuff, and I mumbled and stumbled so much that they made me read this one. So if I could, very quickly I will read you an oral testimony.

Senator COCHRAN. All right.

Mr. SWEENEY. Thank you for allowing me as a representative of the National Rural Water Association and the Tennessee Association of Utility Districts to appear before this important committee today. We want to express our deepest appreciation for the help you and this committee have provided in the past for the Farmers Home Administration's rural water grant and loan program, and for our special rural water circuit rider technical assistance program. We are here today to request the continued support of you and the committee for these two very important rural water programs.

The first program is the rural water and sewer grant and loan program. This program has been the only viable source of financing available to the majority of nonprofit water systems across this country. Rural water districts do not have the legal standing to float bonds, in many cases, or levy taxes, or seek other types of public financing. Private financing has seldom been an alternative because of its high cost and consistent unavailability. Yet, the repayment rate on water and sewer loans exceeds 99.5 percent, and we don't know of any water system in this country that has defaulted resulting in the Government losing money.

This is probably the soundest Government loan assistance program in the Nation. We urge you and the committee to retain the level of funding for the program at $340 million for loans and $115 million for grants.

The second program is our rural water technical assistance circuit rider program that is operated in 33 States. A full-time rural circuit rider, working under the oversight of each State Rural Water Association, is available to provide hands-on assistance and guidance to all rural water systems in a State regardless of size or problem. This allows many rural systems to steadily improve the efficiency of their operation and the quality of the water delivered.

Circuit riders have saved significant amounts of money in preventing water loss, reducing the need for replacement of pipes, pumps, and other equipment, improving compliance with the Federal Safe Drinking Water Act, and in working with systems to set adequate water rates to provide funds for continuous preventive maintenance.

Over 15,000 visits have been made in 33 States to rural water systems this past year. We are urging the committee to retain this program at the $2.1 million level and at its present level of operations.

Finally, we want to inform the committee of the financial impact of the Federal requirements under the new renewal of the Safe Drinking Water Act. The new law requires EPA to issue 35 new drinking water standards within the next 3 years, to create new enforcement procedures for public water supplies, require mandatory treatment technology for small systems unless a variance is obtained, and require mandatory monitoring—that is, increase sampling for small systems—by all systems of the EPA-generated containment list.

In addition, civil penalties can now be assessed against small systems even if failures to meet standards was not willful. In short, the burden on rural systems increases significantly. In Tennessee, for example, the cost of testing a well for the new organic pollutant requirements will increase from about $500 to over $1,400.

The Farmers Home Administration grant and loan program and the in-the-field circuit rider are critical if rural systems are to have any chance of meeting these new Federal requirements.

In closing, we want to thank you again for your past support of rural water and to urge you to maintain the funding levels for the Farmers Home Administration Water and Sewer Loan Program at $340 million and the Farmers Home Grant Program at $115 million. We are requesting that the NRWA circuit rider program be maintained at a level of $2.1 million, which would allow NRWA to continue to provide circuit rider assistance through the 33 State rural water associations. Thank you, sir.

### IMPORTANCE OF RURAL WATER PROGRAMS

Senator COCHRAN. Thank you, Mr. Sweeney. I appreciate your being here today to discuss this program, because it is one that has meant a great deal to a lot of the rural areas of the country, particularly in areas like Mississippi, I know, where we have people who are enjoying the benefits of fresh water. The access to it just would not have been possible without the loan and grant programs operated by the Farmers Home Administration.

I hope we can find the room within the budget and within the funds that are allocated to this subcommittee to fund these programs and to continue the funding of the circuit rider program. You mentioned that. I know you probably also know that last year this subcommittee increased the amount available to that program up to a level of $2.1 million, and your request is simply to continue, as I understand it, that level of funding.

Mr. SWEENEY. Yes, sir.

Senator COCHRAN. That does provide important services. Technical assistance, for example, helps in the management responsibilities of water systems. In some cases, these systems just don't have people available to provide the expertise that is needed to run a system of that kind, so the circuit rider program provides that to many systems. I think it pays off, because if they weren't being operated right in terms of maintenance and financial safeguards, then the program would collapse. The systems would fall apart, and that would be a big waste. We don't want to see that happen.

So we are sympathetic to your views, and I hope we can find the funds within our allocation to provide the money you're requesting for these important programs. Thanks very much for being here.

Mr. SWEENEY. Thank you, sir, and we appreciate your support.

[The statement of Mr. Sweeney follows:]

## STATEMENT OF JIM SWEENEY

Mr. Chairman, thank you for allowing me, as a representative of the National Rural Water Association and the Tennessee Association of Utility Districts, to appear before this important Committee today. We want to express our deepest appreciation for the help you have provided in the past for the Farmers Home Administration rural water grant and loan program and for our special rural water circuit rider technical assistance program. We are here today to request the continued support of you and the Committee for these two very important rural programs.

We would also like to thank you for the help you gave many small rural water systems with the provisions this Committee included in P.L. 99-88 which now allows water systems to utilize the lesser interest rate available at either the time of the closing of a loan or the loan commitment. This has allowed many hard-pressed small water systems to move ahead with long pending loans over the past three months which are needed to improve operation of their facilities and the quality of their water.

We are requesting your continuing help today because rural water systems are facing their most difficult times in history. The Congressional reauthorization of the Environmental Protection Agency's Safe Drinking Water Act (SDWA) again places an emphasis on the monitoring and testing of the water quality in small rural water systems. The reduction in FmHA grant and loan funds over the past four years has seriously limited the amount of assistance available to improve the quality of small systems and to expand water service to more marginal rural areas. Finally, as many systems become older there is an increasing need to upkeep and maintain rural water systems to protect the enormous investment made by FmHA and local rural communities.

The renewed funding of the FmHA water and sewer grant and loan program and the continuation of the grassroots rural water circuit rider technical assistance program will go a long way in helping resolve these deep concerns. The grant and loan funding is critical, because it is the only viable source of financing available to the majority of non-profit rural water systems. Rural water districts do not have the legal standing to float bonds, levy taxes or seek other types of public financing. Private financing has seldom been an alternative because of its high cost and consistent unavailability. Yet, the repayment rate on water and sewer loans exceeds 99.5% and we don't know of any water system that has defaulted resulting in the government losing money. This is probably the soundest government loan assistance program in the nation.

These grants and loans allow systems to repair and improve equipment to meet SDWA standards, to expand water service to hard-to-reach areas and allow rural communities to provide the type of water service required to retain industry, business and commercial activities. There are 390 FmHA-assisted rural water systems in Tennessee which form the backbone of rural community life. Without good water rural America and rural Tennessee become uncompetitive and without the FmHA grant and loan program rural water systems lose their primary source of funding and financial assistance. The backlog of requests for assistance is over twice the amount that was available last year. Any decrease in the funding level would further aggravate this backlog in available funds. Rural America, very badly, needs a rural water and sewer program at the $340 million loan and $115 million grant level.

The second area of our concern is the assistance available to help improve the operation and maintenance of existing rural water systems. Most rural water systems were developed because neighbors got together and decided that something had to be done about the poor quality or lack of water. These people formed water districts, signed up customers, borrowed funds from the only source available - FmHA - and set up a small water system operation with part-time personnel. As you know Tennessee was able to utilize this program to provide rural water throughout our state.

Repair and maintenance were often carried out by local users on a part-time basis. The planning for and construction of water systems at this level has been relatively simple compared to the major governmental and utility organizations required to operate and maintain the rural telephone, rural road and rural electric systems. As a result, up until about ten years go rural water systems had little interest or reason for working together to identify and solve common problems.

However, rural water systems began to face an entirely new set of problems with the passage of the Safe Drinking Water Act (SDWA) in 1974 and the increased demand by rural residents for better drinking water. Rural water systems have had to adjust to the increased environmental pressures caused by an expanding rural population and how to improve the quality of water supply in what has been a small scale non-profit operation. It is in this context, that about ten years ago, most small rural water systems began to organize themselves into state rural water associations in order to begin to discuss common problems they were facing in a more complicated environmental world.

These systems were as varied in their size and structure as rural America itself. Many users were still small 'mom and pop' operations, others had grown from a few hundred households to several thousand while many small towns were having serious operational problems with old and worn out water systems. The common problem among those systems was the need to improve the quality of the water while continuing to provide water in the most cost effective manner possible.

What evolved from this need is the rural water circuit rider technical assistance program now operating in thirty-three states. A full-time rural circuit rider, working under the oversight of each state rural water association, was made available to provide hands-on assistance and guidance to all rural water systems in the state regardless of size or problem. This allowed many rural systems to steadily improve the efficiency of their operation and the quality of the water delivered. Circuit Riders have saved significant amounts of money in preventing water loss, reducing the need for replacement of pipes, pumps and other equipment and in working with systems to set adequate water rates to provide funds for continuous preventive maintenance.

For example, in Kentucky, over the past year, approximately $619,841.00 was saved in water loss in 68 water systems (based on 826,455,600 gallons saved at a conservative estimate of 75 cents per 1,000 gallons.) This was the result of an aggressive water leak detection program by the circuit rider which provided on-site guidance to rural water systems - and equipment for them to use - for the purpose of identifying and repairing leaks. This same program has produced similar benefits from New York to Alabama and from Utah to Maine. While this is but one small example of the grassroots effectiveness of the circuit riders, it is typical of the impact that circuit riders are having on improving SDWA compliance, preserving water sources, saving operating costs and strengthening the overall performance of all rural water systems.

Attached to this testimony is a chart describing the number of visits made by the Circuit Rider in each state and the type of technical assistance provided. There have been over 14,982 visits made to rural water systems throughout the thirty-three states this past year. We invite all of you to come spend some time with a circuit rider when he visits a small rural water system. We believe you will appreciate the value of the direct relationship between the circuit rider and the water system and the success the hands-on approach has in solving small water problems.

In closing, we want to again thank you for your past support of rural water and to urge you to maintain the funding level for the FmHA rural water loan program at the $340 million level and the FmHA grant program at $115 million. We are requesting that the NRWA Circuit Rider program be maintained at a level of $2.1 million which will allow NRWA to provide circuit rider assistance through the state rural water associations.

CIRCUIT RIDER TECHNICAL ASSISTANCE VISITS:
October 1, 1984 to September 30, 1985

| | TOTAL | OPERATION | MAINTENANCE | MGMT | FINANCE | COMPLIANCE |
|---|---|---|---|---|---|---|
| ALABAMA | 413 | 337 | 18 | 38 | 16 | 4 |
| ARKANSAS | 443 | 193 | 193 | 51 | 6 | 0 |
| COLORADO | 474 | 215 | 100 | 147 | 7 | 6 |
| FLORIDA | 483 | 249 | 51 | 121 | 17 | 51 |
| GEORGIA | 435 | 271 | 76 | 81 | 7 | 0 |
| ILLINOIS | 458 | 139 | 201 | 70 | 30 | 23 |
| INDIANA | 447 | 167 | 114 | 159 | 4 | 3 |
| IOWA | 505 | 368 | 25 | 103 | 4 | 5 |
| KANSAS | 445 | 215 | 48 | 165 | 7 | 11 |
| KENTUCKY | 507 | 277 | 196 | 17 | 0 | 28 |
| LOUISIANA | 498 | 146 | 105 | 108 | 108 | 38 |
| MAINE | 453 | 200 | 145 | 75 | 21 | 12 |
| MINNESOTA | 442 | 219 | 143 | 46 | 28 | 0 |
| MISSISSIPPI | 640 | 90 | 188 | 361 | 1 | 0 |
| MISSOURI | 435 | 132 | 218 | 81 | 2 | 2 |
| MONTANA | 451 | 129 | 115 | 198 | 2 | 9 |
| NEBRASKA | 456 | 142 | 162 | 82 | 65 | 5 |

| | TOTAL | OPERATION | MAINTENANCE | MGMT | FINANCE | COMPLIANCE |
|---|---|---|---|---|---|---|
| NEW MEXICO | 509 | 25 | 420 | 21 | 35 | 10 |
| NEW YORK | 421 | 229 | 175 | 16 | 0 | 1 |
| NORTH CAROLINA | 421 | 155 | 180 | 86 | 0 | 0 |
| NORTH DAKOTA | 463 | 220 | 136 | 87 | 13 | 9 |
| OHIO | 410 | 107 | 142 | 152 | 7 | 2 |
| OKLAHOMA | 436 | 107 | 15 | 291 | 13 | 15 |
| OREGON | 424 | 207 | 135 | 13 | 33 | 43 |
| SOUTH CAROLINA | 441 | 210 | 69 | 137 | 17 | 8 |
| SOUTH DAKOTA | 472 | 209 | 117 | 106 | 31 | 10 |
| TENNESSEE | 549 | 162 | 182 | 180 | 0 | 26 |
| TEXAS (1) | 426 | 136 | 46 | 170 | 3 | 0 |
| TEXAS (2) | 322 | 140 | 94 | 175 | 23 | 2 |
| UTAH | 553 | 91 | 271 | 134 | 6 | 56 |
| VERMONT | 435 | 231 | 161 | 9 | 19 | 17 |
| WYOMING | 469 | 157 | 174 | 52 | 19 | 73 |
| | 14,982 | 5,896 | 4,447 | 3,723 | 547 | 469 |

## National Rural Electric Cooperative Association

### STATEMENT OF BOB BERGLAND, VICE PRESIDENT

ACCOMPANIED BY:
FRANK STORK, CHAIRMAN, LEGISLATIVE COMMITTEE
TOM SHOWS, PEARL RIVER VALLEY ELECTRIC ASSOCIATION, COLUMBIA, MS
HARRY BOWMAN, GENERAL MANAGER, NORTHERN VIRGINIA ELECTRIC COOPERATIVE

Senator Cochran. Our final panel this afternoon is the National Rural Electric Cooperative Association. It is represented today by Mr. Bob Bergland, who is the vice president of the association, Mr. Frank Stork, and Mr. Tom Shows.

Mr. Bergland. Thank you very much, Mr. Chairman. If it pleases the committee, we have rather lengthy statements we would like to include for the record and shorten them up in our brief discussion.

Mr. Chairman, we are about 1,000 consumer-owned electric cooperatives in 46 States, serving about 9 million families with electric power at cost, financed largely by an agency of the United States known as the REA. Under that law, the cooperatives are required to provide blanket coverage—that is, we serve all customers, even persons who live in faraway places. We charge everybody the same rate. And we are obliged by law to provide this electric service at the lowest possible cost.

The problem we have is that running a rural electric utility is inherently more expensive than a city utility because of density problems. We have only five consumers per mile of line. City systems have 40. Our power supplies are generally newer and more expensive than city systems. So we have built-in costs that run the cost of electric service to these 9 million families higher than city systems. We are not complaining about it; we are stating as a matter of fact that it's a tough go.

In the lengthy statement, we are asking for finance levels for this next year at $622 million for the insured loan program and $813 million for the guaranteed loan program, as a minimum.

It's interesting to note that in 1981 the cooperatives borrowed $5.8 billion from the REA to fund their essential services, and last year that had dropped to $637 million.

Mr. Chairman, in the last couple of years, we worked with the committees of the House and Senate that have been struggling with the awful problem of the deficits in the Federal budget, and we have agreed to take every action we could to reduce our dependency on the REA.

We have agreed to comply with the reductions mandated by the Gramm-Rudman law. And we are not complaining. As a matter of fact, we're doing everything we can to reduce our dependency on the REA. But we have sort of hit the bottom. We are at a level now, Mr. Chairman, where we simply can't cut any further from the dependency we now have on the Agency. It has been suggested that the Agency could now go out of business. We think that would be a tragic mistake, because we still have large numbers of systems in high-cost areas that desperately need the continued support of the agency, the REA.

NEED FOR REA CONTINUES

A few weeks ago the Administrator of the Agency, Mr. Hunter, sent a letter to Members of Congress suggesting that the Agency had finished his work. And he was especially critical of a factor which has evolved. Back 50 years ago, when the co-op started, every one was about like every other one: They were all farm, all poor, and there was really no great variation within a service area. Well, times have changed, and now every co-op has areas within its trade territory that are more densely populated than other areas in that same cooperative.

The administrator has suggested that if a cooperative has within its service areas a more densely populated region, that it should be ineligible for REA financing. We think this is not fair. The cooperative does charge everybody the same rate for a kilowatt hour of electricity—every consumer, homeowner, that is—and it's true that in some areas the cooperatives do service communities that are more densely populated. They take what savings there are in that, and they use them to provide electricity at the lowest possible cost out into the more open, remote countryside.

If we were to operate cooperatives on the basis of profit, we would probably have to stop service to at least one-third of our members, because it's inherently more expensive if they live in faraway places.

So we just simply cannot distinguish or make a distinction between consumers who live close to each other as compared with consumers who live faraway. A cooperative borrower needs to be considered in its entirety by the Agency, the REA, as they consider the financing requirements for the coming year.

For example, in the business of school bonding, I live in Fairfax County, VA, second highest per capita county in the United States. When that school floats a bond, it is tax-exempt. It doesn't matter that we are well-heeled citizens of that county; we still receive the tax exemption. And so it is with the investor-owned tax provisions. The Internal Revenue Service does not inquire as to the density of that utility or other conditions or criteria as it considers whether that investor-owned utility is allowed to take certain tax deductions.

So, Mr. Chairman, we reject Mr. Hunter's contention that we ought to be making distinctions between cooperatives that have more densely populated service areas and those that do not.

Mr. Stork, on my right, is the chairman of our legislative committee from the State of Missouri and is here in that capacity. He has, I think, no statement to make but would respond to questions you may have. But my two colleagues on my left, Mr. Tom Shows from Mississippi, and Mr. Harry Bowman from Virginia, are managers of cooperatives that have this problem or this question of density that they would like to discuss briefly with you and your colleagues.

If it please the Chair, I would yield to Mr. Harry Bowman from Virginia.

[The statement of Mr. Bergland follows:]

## STATEMENT OF BOB BERGLAND

It's my pleasure to appear before you today on behalf of the more than 25-million Americans in 46 states who depend on NRECA member systems to supply dependable and affordable electric energy for their homes, farms and businesses. The leadership of the nation's 1,000 consumer-owned rural electric systems deeply appreciate the ongoing interest and unwavering support which our program has received from members of this Subcommittee, along with a majority of your colleagues in the Senate and in the House of Representatives.

We like to think that we have earned that support by what we have been able to accomplish -- with your help -- over the 51 year history of the rural electrification program. We're proud of what the rural electrification program, working in partnership with the federal government, has done to change the face of rural America. We're proud of what we're doing today to ensure that reliable electric service will continue to be available to all who wish to have it in the areas we serve. We're proud of what we're doing to keep costs down and rates as affordable as possible given the nature of the areas we serve. And we're especially proud of the work being done by rural electric systems in many parts of the country to improve the quality of life for their members, including active support for jobs creation and economic development efforts.

We hope that the members of this subcommittee and others in Congress who have supported the rural electrification program over the years share in this pride. You certainly have every right to do so.

Mr. Chairman, for the fifth time in as many years we are coming before you not only to discuss NRECA's recommendations for REA lending levels in the next fiscal year, but also to respond to the latest series of charges and criticisms put forth by the present Administration to justify their proposals to dismantle the program.

Many of the arguments put forth in this latest round -- for example, that the job of REA is over since almost all of the nation's farms now have access to central station electricity -- have been raised, refuted and rejected time and again. I'll not waste the subcommittee's valuable time plowing that ground again.

There are a number of allegations, however, particularly those stemming from a so-called "study" which Administrator Hunter provided to this subcommittee several weeks ago, which demand our response. This is particularly so in view of the fact that the Administrator has seen fit to distribute this material, accompanied by a letter which we consider both inflamatory and misleading, to every member of the Congress.

In general, we feel the REA study intended to support these proposed cuts and changes in the loan program is seriously flawed in several fundamental ways.

* We do not believe that an individual borrower can be fairly or accurately characterized by examining only individual construction projects, rather than looking at the density of the entire system. To extend this reasoning to entire states, as has been done in the REA study, borders on the ridiculous.

One need look no further than the fact that the REA study "proves" that states such as Idaho, Utah and Texas are "high density" to see that something is seriously wrong here.

* We also take major exception to the methodology used in REA's analysis, under which the entire amount of a loan is treated as though it was used for new service extension when, in many cases, substantial portions of these funds are used for system improvements and upgrading of existing lines and equipment located in very low density areas of the system.

> Finally, we note that the Administration steadfastly refuses to give any consideration to the fact that reducing or eliminating the assistance provided through REA -- without making corresponding adjustments in the subsidies provided to private and municipal utilities through tax policy -- will serve only to worsen the rate disadvantage under which 75% of REA borrowers already operate.

Let me address some of these items in greater detail:

In his letter of March 27th, Administrator Hunter expressed alarm over "serious inequities" in REA's lending procedures and then went on to make the categorical statement that ". . .80 percent of the agency's subsidized loans are not helping rural areas. . ." The basis for this is an REA study, dated March 14 and replete with maps, tables and graphs, which would have us believe that if any portion of the area served by an REA borrower has a consumer density greater than five per mile, the entire borrower has somehow lost its right to be considered "rural." We strongly disagree with both the logic and the facts behind this notion.

First of all, we believe the only reasonable way to look at a rural electric system is in its entirety. Each member-owner of a system shares equally in the responsibility to repay loans to REA and other lenders. Every member pays the same rate for power, regardless of how close or far their neighbors may be.

The cornerstone of area coverage, the concept that has made it possible to provide service to some pretty far-flung places in rural America, is that you test the feasibility of serving a new consumer on how that service extension will affect the condition of the system as a whole.

In many cases, providing service to remote and sparsely populated areas could never have been justified were it not for this "all together" approach to determining feasibility.

We believe that the concept of area coverage is just as relevant when applied to the service extensions in areas Mr. Hunter characterizes as "high" and "medium" density. (It should be noted how Mr. Hunter's definition of "high" density as more than 10 consumers per mile compares with the investor owned utility's average density of 31 per mile, and the municipal utility average of 65 per mile.)

The question should not be how many consumers per mile will be served by a particular extension, but rather how will this new service effect the financial and operational condition of the system as a whole.

Consumer-owners in the past were willing to sacrifice some of the financial strength of their systems in order to extend service to remote areas. Should these systems now be denied a chance to gain back some small measure of that strength by imposing higher financing costs for extending service in areas which, over time, have become somewhat less rural? We believe that this would be both unwise and unfair. If it makes the entire system stronger, every loan REA makes benefits not only new consumers but old ones as well. On this basis we believe there is no support whatsoever for Mr. Hunter's allegation that REA loans are not helping rural areas.

In his testimony before this subcommittee last month, Administrator Hunter also expressed support for a number of specific proposals to increase financing costs and impose other new charges on REA borrowers.

For several years NRECA has maintained what we believe is an open-mind and constructive attitude regarding possible changes in the terms of REA lending. In the 98th Congress we gave our enthusiastic support to proposed legislation, H.R. 3050 and S. 1300, which would have increased the basic interest rate on REA insured loans.

In return for accepting higher financing costs on our members, we have asked only (1) that the rate be reasonably related to the cost of funds to REA and (2) that steps be taken to ensure the long-term availability of REA as a primary capital source for rural electric systems. We believe that the Administration's current proposal for changes in loan terms fall far short on both counts.

Raising the REA insured rate to the Treasury's cost of money plus 1.125 percent would result in a new REA rate (based on 30 year Treasury obligations as of April 4, 1986) of 8.6 percent -- an increase of more than 70% from the current five percent rate. Add to this the effect of the 5% upfront user fee REA proposes to charge on new insured loans, and the effective interest rate becomes 9.1 percent. Over and above this would be the effect of the Administration's proposal to charge rural electric borrowers some $183-million in FY 1987 through a "fee for losses." The imposition of a fee of this magnitude could result in such large increases in the effective rate on REA loans as to mean the virtual termination of the lending program.

We further take strong exception to the efforts the Administration has made to justify these added costs by pointing to the fact that many rural electric systems have been successful in improving their financial profile in recent years and therefore should be able to absorb this increase in costs "without further adversely effecting the economics of the agricultural community."

Much of this "improvement" has come as a result of past rate increases put into effect at the encouragement and, sometimes, the insistence of REA and other lenders, concerned that borrowers maintain certain financial ratios and equity levels. The downside of this trend, which the Administration has consistently failed to address, is that it has worsened the already severe rate disparity that exists between rural electrics and their neighboring investor owned utilities.

In considering the question of rate comparability, it's also important to recognize that subsidies in one form or another are being provided to each of the three major segments of the electric utility industry. Given the spate of recent articles in the business and trade press regarding the relative prosperity of many investor owned utilities, it would seem reasonable to expect that they also would be called on to do their part by accepting reduced assistance. It is unlikely that the tax subsidies now enjoyed by private power companies will be eliminated or that the assistance provided to publicly owned systems through tax exempt financing will be reduced.

We strongly believe that rate comparability on a regional or neighboring system basis must be a major consideration in any evaluation of the relative subsidy provided to various segments of the utility industry. This is particularly critical in view of the pressing need we see for an expansion of the economic base of rural America to compensate for the depressed condition of the agricultural sector.

While Mr. Hunter says don't worry about the extra 65 cents per month that the Administration's proposals would (according to their analysis) cost the average rural electric consumer, we do worry -- about how an extra $1,000, $5,000 or $10,000 a month in power costs might affect the willingness of new industries to locate in rural areas or how these costs will add to the financial burdens of the already devastated farm sector.

The last specific point on the Administration's wish list which I feel compelled to address is the proposal to which I referred earlier, that would impose an annual fee on REA borrowers "to cover principal and interest losses that have resulted from non-payments of borrowers."

Mr. Chairman, NRECA and its members are painfully aware of the problems being experienced by several of our power supply systems. Less than anticipated demand for power and plant cancellations have created a crisis which has cast a long and deep shadow of uncertainty over much of the program. We're doing everything humanly possible to find equitable solutions to these problems and will continue to do so.

We feel strongly, however, that any proposal which would place the entire burden of these problems on the shoulders of REA borrowers alone is unreasonable, unfair and directly contrary to the clear intent of Congress when the 1973 amendments to the Rural Electrification Act created the guarantee program. We believe that the imposition of the type of assessment being proposed by the Administration which would result in exhorbitant charges to borrowers, goes against both the letter and spirit of the law.

SPECIFIC PROPOSALS FOR FISCAL YEAR 1987

As you may recall, Mr. Chairman, last year at this time we presented recommendations for REA lending levels that represented a more than 20 percent reduction over the prior year. At that time, we expressed the view that the observed fall off in demand for REA loans was attributable to the depressed economic conditions in the agricultural sector specifically and throughout rural America in general.

We also discussed the increasing reliance by rural electric systems on internally generated funds as opposed to capital borrowed from REA or elsewhere. Co-ops were reinvesting these funds in their systems rather than reducing rates or returning them as capital credits, largely because of continuing uncertainty and concern about the future of the REA program.

I wish I could report today that this situation has significantly changed. I wish I could say that the economic recovery, reduced inflation and lower interest rates which have come about in recent years have improved the fortunes of agriculture and rural America. I wish I could report that the leaders of rural electric systems feel renewed confidence in the future of REA as a dependable and constructive partner in our continuing effort to provide electric energy and other vital services to the people of rural America.

Unfortunately, I cannot make such a report. Demand for loan funds is still down and remains very much uncertain. Confidence in the future of our relationship with REA is still low, as a result of the Administration's persistence in planning its demise. And if anything, the farm crisis in many areas has become only deeper and more filled with despair.

On this basis, we believe the best course of action would be to maintain the existing (FY 1986) electric program levels for REA insured and guaranteed loans, as adjusted earlier this year under the provisions of the Gramm-Rudman-Hollings Deficit Reduction Act.

Specifically, this would establish a floor of $622-million and a ceiling of $933-million for insured loans, and a floor of $813-million and a ceiling of $1,961-million for loan guarantees in the year beginning October 1, 1986. Rural electric systems have already accepted substantial reductions in loan levels. During the period FY 1981-1985, REA loans and guarantees have dropped by 89.2% -- from $5.8 billion in 1981 to $636 million in 1985.

We strongly oppose, Mr. Chairman, the proposal to reduce appropriated funds for REA administrative expense in anticipation of the loan origination fee suggested in the Administration budget.

We urge -- and have based our recommendations upon -- maintenence of the current ratios and criteria applied to supplemental loan requirements for insured lending, and strongly oppose any plan to arbitrarily limit the application of the REA guarantee to some fraction of the borrower's captial need.

Finally, we continue to strongly oppose the elimination of any major services now provided by REA, such as those provided by its Engineering Standards Division. We will not support any reorganization plan at USDA which would reduce the effectiveness of REA or remove from the agency its key administrative functions in such areas as personnel and budget.

Before closing, Mr. Chairman, I would take just one additional moment to reaffirm NRECA's continuing strong support for an aggressive and effective federal program for rural area development, including the housing and other rural services programs administered by the Farmers Home Administration. Given the continuing economic crisis in the agricultural sector, we feel these programs are more important now than ever before, and should be funded at levels commensurate with need.

Thank you again, Mr. Chairman, for this opportunity to present our views to the Subcommittee. I will be delighted to respond to any questions you may have now or at any time in the future.

### STATEMENT OF HARRY BOWMAN

Senator COCHRAN. Welcome to the committee, Mr. Bowman.

Mr. BOWMAN. Thank you. I am Harry Bowman. I am the general manager of the Northern Virginia Electric Cooperative. Our cooperative provides service to five counties in Northern Virginia, and I am pleased to be here, because we are often referred to as one of the cooperatives that should not receive service—or receive any benefits from the Rural Electrification Administration. I would just like to make a few comparisons of the Northern Virginia Electric Cooperative as compared to our local utility, which is Virginia Power Company.

Despite the fact that we are one of the high-density co-ops, one of the highest in the country, we are still very small when it's compared to our neighbors. Our density is 14.7 consumers per mile. Our neighbor, Virginia Power, has 29.7 members per mile. We have revenues of $20,000 per mile annually as compared to their $49,000 per mile.

Unfortunately, we have rates that are slightly higher. Our rates are $75.62 per 1,000 kilowatt hours, and Virginia Power is $70.47. We only have an equity ratio of 20.7. Virginia Power has 38.6. We serve primarily residential consumers. In 1984, 70 percent of our load was residential load. Virginia Power had 38 percent residential load, the balance being high-density industrial load.

Our cooperative is among the largest rural electric systems in the country. We serve 43,000 members. The average rural electric cooperative only serves 7,000 members.

Despite all of that, we are very small when compared to any of the investor-owned utilities. We have annual revenues of around $60 million, and our neighbor, Virginia Power, has $2.5 billion.

Let's look at Federal assistance. As you know, all segments of the electric utility industry receive subsidies from the Federal Government, the municipals through tax-exempt bonds, and the investor-owned through investment tax credits and rapid depreciation.

Virginia Power's members each year receive about $885 million of tax-free money through these types of investment credits and the rapid depreciation. That amounts to a Federal assistance of $50.20 per each one of their members. When you take the assistance that Northern Virginia receives through the Rural Electrification Administration in the 5-percent loans, it relates to about $33 per each one of our members. So you can see that the IOU's receive a lot more assistance than the rural electric cooperatives even in the very dense areas.

It seems very unfair to me for the administration to propose the elimination of the Rural Electrification program, while at the same time retaining many of the benefits for the investor-owned and municipal systems.

Mr. Chairman and members of the committee, I appreciate the opportunity to be here this afternoon. I hope some of these facts will dispel the ideas that have been spread by those who would like to ruin the program. Thank you very much.

Senator COCHRAN. Thank you, Mr. Bowman.

[The statement of Mr. Bowman follows:]

### STATEMENT OF HARRY BOWMAN

My name is Harry Bowman. I am general manager of the Northern Virginia Electric Cooperative [NVEC] which is headquartered in Manassas, Virginia.

Our cooperative provides electric service to approximately 43,000 consumers located in portions of several Northern Virginia counties. I am pleased to have this opportunity to discuss our cooperative because it is often referred to by REA Administrator Harold Hunter and the REA lobbyists as an example of the type of cooperative that should NOT be eligible for REA loans.

I think a few comparisons between NVEC and our investor-owned neighbor, Virginia Power Company, will be helpful to the committee.

One: Despite the fact that Northern Virginia Electric Cooperative serves a more densely populated area than the vast majority of rural electric systems, its density is only half that of Virginia Power Company—14.7 as compared to 29.7 consumers per mile of line. Our 1984 revenue per mile was $20,414 compared to $49,174 for Virginia Power Company.

Two: Unfortunately, our cooperative has higher rates than Virginia Power Company. As of April 1986, our residential consumers pay $75.62 per month for 1,000 kWh compared to $70.47 for a Virginia Power consumer.

Three: Despite our higher rates, Virginia Power Company has a significantly higher equity ratio. Our cooperative closed 1984 with an equity ratio of 20.7 percent compared to 38.6 percent for Virginia Power.

Four: Northern Virginia Electric Cooperative serves primarily residential consumers, whereas Virginia Power Company, like most investor-owned utilities serves mainly commercial and industrial load. For example, during 1984, 70 percent of the kWh sold by our cooperative went to residental consumers, compared to only 38 percent for Virginia Power.

Five: Our cooperative is among the largest rural electric systems in the country. During 1984 we served 43,000 consumers compared to the median co-op which served only about 7,000. However, compared to an investor-owned utility, our cooperative is relatively small. Our 43,000 consumers compare to the 1.5 million served by Virginia Power. Our cooperative collects annual revenues of about $60 million; Virginia Power collects about $2.5 billion each year. During 1984 our cooperative sold about 812,000 mWh; Virginia Power sold 41,800,000 mWh.

Six: Let's compare Federal assistance for a minute. As you know, all segments of the electric utility industry receive subsidies from the Federal Government. Municipal and other publicly owned utilities receive assistance through authority to sell tax-exempt bonds.

Virginia Power Company, like other investor-owned utilities, receives government assistance through tax breaks—primarily investment tax credits and accelerated depreciation. These provide the utility the equivalent of an interest-free loan. As of the end of 1984, the amount of accumulated investment tax credits and deferred taxes held by Virginia Power totaled $885.7 million.

Northern Virginia Electric Co-op receives assistance through 5 percent loans from the Rural Electrification Administration. As of the end of 1984 REA loans outstanding to this cooperative totaled $41.2 million. The cost of the assistance provided to Virginia

Power exceeds that of our cooperative, both in total dollars and on a per-consumer basis.

If we assume an 8.5 percent current cost of money to the Government, the $885.7 million of deferred taxes held by Virginia Power costs the Government $75.3 million annually, or $50.20 for each of Virginia Power's 1.5 million consumers.

Our cooperative's $41.2 million in REA loans also costs the Government something—the difference between the REA interest rate of 5 percent and the Government's cost of money now about 8.5 percent. That difference results in a cost of about $1.4 million or $35.20 for each of our cooperative's 43,000 consumers—30 percent less assistance per consumer than is being received by Virginia Power Company, despite our higher retail rates.

It seems terribly unfair to me for the administration to propose the elimination of REA while at the same time retaining substantial subsidies for investor-owned and municipal utilities.

Mr. Chairman and members of the committee, I appreciate the opportunity to discuss my cooperative with you this afternoon. I hope some of the facts which I have conveyed will help to dispel the deliberate misrepresentations that have been circulated concerning the rural electric program.

## STATEMENT OF TOM SHOWS

Senator COCHRAN. Mr. Shows, welcome to the committee.

Mr. SHOWS. Thank you, Mr. Chairman. I am general manager of Pearl Valley Electric Power Association in Columbia, MS. We serve approximately 23,000 consumer owners in south Mississippi.

REA Administrator Hunter's letter classified Mississippi as a high-density State. I think you probably know better than anyone that Mississippi is not a high-density State. We average serving 5.2 consumers per mile, and let's compare that a little bit with the commercial power company that is our neighbor. They serve 37 customers per mile.

Another comparison is that we receive from that mile of line $5,200 per year, and for the same mile of line, they receive a revenue of approximately $90,000.

Our rates are about 25 percent higher than theirs are. For 1,000 kilowatt hours we get $76.30. They, for the same 1,000 kilowatt hours, get $61.07.

Let's talk for just a moment about density. We have the privilege of serving Perry County in south Mississippi. And if you remember, in your first campaign, that was one of your home counties.

Senator COCHRAN. It still is. [Laughter.]

Mr. SHOWS. We serve a density in that county of 2 meters per mile of line. There's no way we could break even without having areas that have a little higher density.

Mr. Chairman, we know that you know our story better than anyone in Congress, and we appreciate your support and appreciate your letting us be here today.

## REA SUPPORT IS JUSTIFIED

Senator COCHRAN. Well, thank you very much, Mr. Shows. I appreciate having the benefit of these comparisons. I think they're helpful to the committee and to anyone who is interested in trying to decide whether or not this is a program that justifies continued Federal support. I think it does justify it, and I think this committee is going to be sensitive to the needs of the REA and try in every way we can to make sure that it's treated fairly in this cycle of the appropriations process.

Everybody knows we have budget constraints that have to be recognized and dealt with. We have new laws and new rules on the books that have to be recognized as binding on this committee. Everybody has to realize that. But within the bounds of flexibility that we do have, I think the committee is going to be sensitive to the needs of this important program.

I don't think the time to do away with REA has come. I don't know that it will ever come. It may, but I don't think it has arrived yet.

It has been pointed out that as a matter of economic fairness, it has a role to play in our society today, to help promote economic fairness. I think we all ought to strive to make available to those who live in rural areas, access to reasonably priced electric power and telephone service. These are very important ingredients of the standard of living that I think we would all want to help assure is available to every American citizen. This doesn't mean we have to make it available free. There is a price to be paid, and it's been pointed out here that in many cases the price per kilowatt hour is higher than many investor-owned utilities have to charge.

I hope we can work out levels of funding and guidelines in our bill that will be satisfactory to you and at the same time reflect an interest in contributing toward the effort to reduce our burden of debt that we have at the Federal level. I think we can do that. I think we can strike that balance. I hope so, anyway. We will work toward it.

I was going to ask you about Mr. Hunter's study. I guess it is just a study. Maybe they're still studying it. Maybe it needs more study. I looked at it. Some friends of mine from Mississippi were here just recently and gave me a copy of a summary of that study. I have reviewed it. I think it needs to be reexamined, because if it does conclude, as my friend Tom Shows says, that Mississippi is a high-density area, then it lacks credibility with me right off the bat.

I appreciate your being here and helping the committee in the way that you have with your testimony today and with your efforts to keep the committee advised about problems in the industry and with the program.

I also want to express my thoughts that we have a responsibility here to help keep the program from being done away with through the administration's decisions that undermined the congressional intent that created the program and that is reflected in the appropriations bill every year. I think that Congress is of the opinion that the program ought to be administered in a way that makes loans available to those who are entitled to loans under law and that to deny them just arbitrarily or capriciously flies in the face of congressional intent and ought not to be tolerated.

We have expressed that view to the administrators when they were here before the committee, and we will continue to work to be sure that the program is administered in a way that gives effect to the intent of the Congress.

## SUBCOMMITTEE RECESS

We have no other witnesses who are scheduled to appear before the committee today, but we will continue our hearings tomorrow, beginning at 2 p.m., in this same hearing room. At that time we will continue to hear from other Members of Congress and the general public regarding the President's budget proposal for fiscal year 1987 for the Department of Agriculture and related agencies. Until that time, the committee will stand in recess.

[Whereupon, at 4:10 p.m., Wednesday, May 7, the subcommittee was recessed, to reconvene at 2 p.m., Thursday, May 8.]

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# AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1987

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THURSDAY, MAY 8, 1986

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.*

The subcommittee met at 2:05 p.m., in room SD–138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Mattingly, and Abdnor.

## NONDEPARTMENTAL WITNESSES

### OPENING REMARKS

Senator ABDNOR [presiding]. The subcommittee will please come to order.

This afternoon we begin the last of four hearing sessions to receive testimony from members of Congress and nongovernmental witnesses who want to express their views or opinions with respect to programs which come under the jurisdiction of this subcommittee.

We have 12 organizations or individuals scheduled to testify this afternoon, and it is for this reason that we ask you to limit your oral comments to 5 minutes. We have your written statements, and they will be included in the record in full. We hope you will summarize your statement so that everyone will have an opportunity to be heard.

I would like to also point out that the subcommittee cannot receive any copyrighted material unless arrangements have been made in advance by the witness to obtain permission of the copyright owners of these materials. This notice is being given to protect the copyright owners, as well as the subcommittee and the witnesses.

### CONGRESSIONAL WITNESS

### STATEMENT OF HON. J. JAMES EXON, U.S. SENATOR FROM NEBRASKA

Our leadoff witness this afternoon is my good friend and colleague from Nebraska, Senator James Exon. Senator, we are happy to have you.

Senator EXON. Mr. Chairman, thank you so very much. It's nice to be here in front of your committee. And thank you for the good job you are doing in this area.

The material that I have has already been submitted, but it's two short pages, well within the 5-minute timeframe. So, to save your time, if I may just read that——

Senator ABDNOR. Please do.

Senator EXON. I would advise the chairman that I have not copyrighted this material, so I think it's entirely proper for inclusion in the record. [Laughter.]

Mr. Chairman and members of the subcommittee, I want to thank you for the opportunity to testify today. Although I am deeply interested in many issues which come before this subcommittee, I would like to limit today's remarks to one or two specific proposals, especially the one with regard to a movement of an important facility out of Lincoln, NE, that serves not only Nebraska but the surrounding area, including the chairman's State of South Dakota.

As you may be aware, the USDA's Soil Conservation Service plans to consolidate four national technical centers. These technical centers provide valuable support services for Soil Conservation Service field personnel. They are currently located in Fort Worth, TX, Chester, PA, Portland, OR, and Lincoln, NE.

During the past several months, I have reviewed numerous documents relating to the SCS consolidation proposals. A 1981 SCS report recommended that the number and locations of the technical centers remain the same, but that certain functions be consolidated. I support that.

Those functions have been consolidated. Yet, the Department of Agriculture is proceeding with their plans to consolidate the balance of the technical center functions even though it has not yet completed the economic analysis of this proposed move. I have yet to see any detailed cost analysis of this specific consolidation proposal and other feasible alternatives.

How can Congress condone such a proposal without having all of the facts at hand?

The Department claims that the consolidation will result in savings for the Federal Government. I find it difficult to believe that vacating existing Federal offices in Nebraska and elsewhere and renovating other space in supposedly cheaper locations elsewhere, which traditionally have higher rents than where the facilities are now located, is a wise course of action.

Furthermore, I suspect that much of the purported cost savings could be achieved and should be achieved through organizational changes within the current structure of the technical centers. Overriding all of these concerns is the reduced level of service which would likely result if this consolidation takes place.

Mr. Chairman and members of the committee, I ask that you direct the Department to abandon these consolidation plans. At a minimum, these plans should be abandoned until the Congress has the input that I have just outlined and all of these things are addressed in a meaningful manner by the Department of Agriculture.

The chairman of the Appropriations Committee, Senator Hatfield, and his Oregon colleague, Senator Packwood, have opposed this move, as have the Senators from Pennsylvania and my Nebraska colleague, Senator Zorinsky. We recently wrote to the Secretary of Agriculture to express our opposition.

I hope that the subcommittee will see fit to make this position its position as well.

I attach for the record, Mr. Chairman, a copy of a letter that I referred to by the six Senators to Mr. Richard Lyng, the Secretary of Agriculture.

### VALIDITY OF CONSOLIDATION PROPOSAL

Senator ABDNOR. How long has this proposal been under consideration, to your knowledge?

Senator EXON. For several years, there has been talk of having a more efficient production by maybe eliminating some unnecessary employees and some unnecessary space. That was part and parcel of the 1981 report that indicated in the first instance that basically from the standpoint of providing the important services these offices provide, it would be penny-wise and pound-foolish to try and have one and one only, in this case in the Southwest part of the United States, in Texas.

I would oppose this move even if the center was chosen as Lincoln, NE, because I believe that Pennsylvania and Oregon and Texas and those surrounding areas are entitled to near-at-home, if you will, as near-at-home as possible, locations.

So, four of these across the United States, given the important role that they play, is not too many. But I agree that savings could be made.

Senator ABDNOR. Thank you.

Senator EXON. One other comment that I would like to make just briefly, Mr. Chairman. I believe it comes under the jurisdiction of this committee.

I did send a copy of a letter that I sent to Mr. Lyng on a related subject, and I sent copies of that to the chairman and ranking member of the full committee. I will provide the chairman a copy of this.

It has to do with some savings that we could make in the Department of Agriculture in a related service to the subject I'm addressing here this morning. And that is the profuse amount of soil maps that are printed by the Department of Agriculture. In one case, in Nebraska we found that they printed enough soil surveys for every two residents in a particular county.

We also found that these soil survey maps, which are very well done and, of course, are very important, have been printed in such supplies that they were stacked high and just taking up unnecessary space in warehouses.

We also found that right here in Washington, the U.S. Department of Agriculture in the past has wheeled out thousands and thousands of these maps and dumped them. What it really amounts to, Mr. Chairman, is buying a 30-year supply of maps and then storing them for future needs when any business obviously would take a 5-year supply, and if they need additional copies would order a reprinting.

I think we could make significant savings in this area, probably more than enough to make up for maintaining these four centers in the locations that I've outlined.

Senator ABDNOR. Would you like to have that made a part of the record?

Senator EXON. I would like to have that made part of the record, and I will see that you are supplied with a copy.

Senator ABDNOR. Thank you.

Senator Exon. Thank you very much, Mr. Chairman.

[The letters to which Senator Exon referred follow:]

## LETTER FROM SENATOR EXON, ET AL.

May 6, 1986

The Honorable Richard E. Lyng
Secretary of Agriculture
Washington, D.C. 20250

Dear Mr. Secretary:

As you know, the Department of Agriculture plans to consolidate the Soil Conservation Service's National Technical Centers located in Lincoln, Nebraska; Chester, Pennsylvania and Portland, Oregon to one location in Fort Worth, Texas. We would like to express strong opposition to this action.

We have not been convinced that anticipated cost savings will be realized. Furthermore, we suspect that similar cost savings could be achieved through organizational changes within the current structure of the Technical Centers. Overriding all of these concerns is the reduced level of service which would be provided by the consolidated Technical Centers in one location in Texas.

In closing, we ask that this consolidation proposal be abandoned until the concerns outlined above have been addressed in a meaningful manner.

With best wishes.

Sincerely,

Edward Zorinsky
United States Senator

J. James Exon
United States Senator

Mark O. Hatfield
United States Senator

Bob Packwood
United States Senator

John Heinz
United States Senator

Arlen Specter
United States Senator

## LETTER FROM SENATOR EXON

Honorable Richard E. Lyng April 25, 1986
Secretary of Agriculture
Washington, D.C. 20250

Dear Secretary Lyng:

Your letter of March 28, 1986 was devoid of a solution to the problem. My concern over excessive printing of soil surveys appeared to be dismissed with a "let's divert attention from the waste" issue. I am once again asking that you consider my concern and address the question on a forthright basis. Radical change is obviously necessary to stop this waste and abuse. Your trite responses to my suggestions and your bureaucratic feeding the press of copies of our letters "ordering" copies are a clever divergence, but ignore the problem.

It was disappointing to me that a new Secretary of Agriculture, who has a chance to cut waste and redirect the funds to help distressed farmers, would ignore my legitimate question of why it is necessary for so many unnecessary soil surveys to be published. If you will remember, I used Cedar County, Nebraska as an example. Your response was that we requested our "full allotment" of surveys for Cedar and other counties in Nebraska. Our Nebraska offices handled this in association with the Department of Agriculture employees in Lincoln. In every case, I am advised the 250 copies were ordered at the urging of the state Soil Conservation Service office. A copy of a typical letter is enclosed.

In the event my staff did not respond by ordering from the first letter, a follow-up contact would be made to my people asking us to order our "full allotment." We did not know then, as we do now, that the Department printed an unreasonable 5,575 copies, for example, for Cedar County alone.

I have discovered the motivation for having each Senator and Congressman order their "full quota," which amounted to a total of 1,500 for each county. The costs of these 1,500 copies for Congressional purposes are borne by the U.S. Printing Office rather than the Department of Agriculture. As it turns out, the policy seems to be to print all we can whether needed or not and obtain Congressional "orders" for the maximum since the costs are not paid by the Department of Agriculture. Our Lincoln office fell into this "trap" and for that we plead "guilty."

The real issue is why print 5,575 copies of a survey for a county that has a population of just over 11,000 people, of whom only about 1,300 are farmers? This is what you ignore! This was not our doing as your agency has tried to imply with file letters distributed to the press.

After checking with two Natural Resources Districts in Nebraska, I found neither office was appreciative of the storage and distribution problems they inherit when the Congressional delegation forwards their allotments to their offices.

It is obvious there is very lax control over where the soil surveys are sent, how they are distributed, or if in fact they end up by the boxful in the trash. I was not aware of the enclosed August 28, 1985 news story in the Washington Post when I first contacted you. If the Department of Agriculture is trashing soil surveys in Washington, it is also likely taking place at the local level.

With no controls, the surveys arrive in huge quantities at agencies that probably have need for fewer copies. Eventually they will go the way of the soil surveys in Washington; they will be trashed.

My office has contacted Don Hood, Manager of the Nemaha Natural Resources District in Tecumseh, Nebraska. He has noted that he has boxes and boxes of surveys that were sent to him which require a huge amount of storage space. Most important, however, he has also indicated he gets less than ten requests per year for the surveys. He presently has 1,000 copies of Nemaha County soil survey maps. Based on ten requests per year, he has a 100-year supply.

I hope you are aware that on March 14, 1986, the Joint Committee on Printing ordered the number of surveys sent to Congress be cut in half. Have you acted on this? Don't you agree we could reduce printings even further? It's my view, for example, that cutting Cedar County's allotment in half for members of Congress only would still leave about 5000 for printing, which is still excessive. Why not do a study of actual users to discover real needs?

My only goal through all of this exchange is to get the Department "on the ball" and decide on a reasonable number of copies needed for a given county, and that a control of inventory and distribution be established to eliminate waste. For my part, I have directed my offices not to "order" any of the surveys to which I am "entitled." Soil surveys are important, but blatant disregard of costs and the unbelievable waste of taxpayers' money must be stopped.

Sincerely,

JJExon

J. James Exon
United States Senator

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## LETTER FROM RICHARD E. LYNG, SECRETARY OF AGRICULTURE

Honorable J. James Exon
United States Senate
Washington, D.C. 20510

March 2 8 1986

Dear Senator Exon:

Thank you for your letter concerning the printing of Soil Conservation Service soil surveys.

As you can see from the enclosed correspondence from your office, you requested your full allotment of the surveys for Cedar and a number of other counties in Nebraska.

By law, the Department is required to print up to 250 copies of each soil survey for each Senator from the State where the county is located. We have complied with that requirement.

Sincerely,

Richard E. Lyng

RICHARD E. LYNG
Secretary

## LETTER FROM SENATOR EXON

March 13, 1986

The Honorable Richard Lyng
Secretary of Agriculture
U.S. Department of Agriculture
Washington, D.C. 20250

Dear Secretary Lyng:

I recently investigated why the U.S. Printing Office prints 250 copies of county soil survey reports for distribution by my office. I have never requested the printing of these reports and would have denied my consent if anyone would have asked.

My investigation of the Cedar County, Nebraska report revealed that the U.S. Printing Office produces 250 copies of each county soil survey report for each U.S. Senator of the state; 1000 for the Congressman of the District; 75 for the University; 3000 for the U.S. Department of Agriculture; and 1000 for the local county office. In Cedar County that adds up to an astounding total of 5,575 for a county which only has a population of about 11,700.

Printing so many copies of these soil reports is highly unnecessary and is ridiculous in this case where a report was printed at a ratio of one for every two people in the county. Under Title 44, U.S. Code, Sec. 1342, the Secretary of Agriculture has authority to determine the number of copies that are printed. In my opinion, the funds used to produce these extra reports would be better spent on farm programs.

This waste is comparable to the $400 hammers the Pentagon has purchased. I think you'll agree the federal government needs to be fiscally conservative, especially in view of the horrendous budget deficit. In Nebraska alone the savings could be substantial when you consider that over the years up to 139,000 copies of the county soil reports are printed solely for Nebraska's Congressional delegation. The savings from printing less nationwide would be very significant.

As one of your first acts as Secretary of Agriculture I urge you to eliminate the wasteful overprinting of these reports by reducing the number printed for Members of Congress and the USDA. I suspect many of these copies simply gather dust on a shelf. In my opinion, Members of Congress require only a few copies for reference purposes and to handle any requests.

As a taxpayer I would appreciate your immediate attention to this wasteful expenditure.

Sincerely,

Jim Exon

J. James Exon
United States Senator

## Letter From Senator Exon

A. E. Sullivan
State Conservationist
Soil Conservation Service
Room 345 Federal Building
Lincoln, NE 68508

April 28, 1982

Dear Mr. Sullivan:

Please order our full allotment of the following soil surveys: Box Butte, Cedar, Hamilton, Kearney, Morrill, and Rock Counties, Nebraska.

Thank you.

Sincerely,

J. James Exon
United States Senator

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## Letter From A.E. Sullivan, Nebraska State Conservationist

Honorable J. James Exon
United States Senate
4327 Dirksen Senate Office Building
Washington, D. C. 20510

November 24, 1982

Dear Senator Exon:

The soil survey of Nemaha County, Nebraska, is near completion and being prepared for publication. This survey, like others made in the state, was made in cooperation with the University of Nebraska, Conservation and Survey Division. The survey contains maps that show each kind of soil and explain how they behave when used for farming, forestry, or as a site for homes or other small buildings, earth dams, or other structures.

We plan to submit this soil survey to the Government Printing Office in Fiscal Year 1984 for publication.

In order to make an estimate on the total number copies to request, we need to know the number you will request for this survey. According to Section 210, Title 44, of the U.S. Code, you are entitled to 250 copies of each soil survey. We would like to suggest that you order your full allotment. We would like to receive your order in writing specifying the number of copies you plan to order by December 24, 1982.

We would appreciate knowing if you have special plans for distributing copies of this survey. If you have not made special plans, it is my suggestion that you assign any copies that are surplus to your needs to the following Natural Resources District:

Don Hood, Manager
Nemaha NRD
P. O. Box 717
Tecumseh, Nebraska 68450

This will enable you to work with us in developing a plan with local interests and the cooperating state interests that will avoid duplications and will make the best use of available copies of this survey.

Demand for these publications cannot be predicted accurately, but we can anticipate that they will be used for 25 years or more by landowners and managers, by engineers, by staffs of your Agricultural Experiment Station and Agricultural Extension Service and by other federal and state agencies concerned with agriculture, forestry, tax assessment and other uses of rural land or with community development. Agricultural, financial and engineering concerns that operate over substantial parts of a state or over several states maintain their libraries of published soil surveys. Besides farmers and those who service farms, planning officials in state, county and local governments, engineers and contractors, land appraisers and prospective purchasers of land are among the many probable users.

After the survey has been reproduced and cleared for distribution by the Superintendent of Documents at the Government Printing Office, we will notify you. This will allow for you to make arrangements for distribution of your copies.

Sincerely,

A. E. SULLIVAN
State Conservationist

cc: Harvey Metz, AC, SCS, Lincoln, NE
Don Hood, Manager, Nemaha NRD, Tecumseh, NE

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## LETTER FROM SENATOR EXON

September 13, 1984

Sherman L. Lewis
State Conservationist
Soil Conservation Service
345 Federal Building
Lincoln, NE 68508-3866

Dear Mr. Lewis:

I appreciated receiving your letter of August 23 concerning publication of the soil surveys for Fillmore, Garfield, Greeley, Platte and Wheeler Counties.

We would like to have our total allotment ordered, and will see that distribution is made to the various Natural Resources Districts as you have suggested.

Sincerely,

J. James Exon
United States Senator

# RECORD SHEET FOR COLLATING STATE ORDERS FOR PUBLISHED SOIL SURVEYS

## SOIL SURVEY OF CEDAR COUNTY, NEBRASKA

| I. SCS ORDER | SHIPPING ADDRESS | NO. COPI |
|---|---|---|
| A. FREE COPIES TO COOPERATING AGENCIES.<br>AGENCY<br>Conservation and Survey Division<br>University of Nebraska | Conservation and Survey Division<br>University of Nebraska<br>113 Nebraska Hall<br>Lincoln, NE 68588 | 5 |
| B. COPIES TO BE BOUGHT BY COOPERATING AGENCIES. (Attach a signed copy of the purchase agreement)<br>AGENCY<br>Conservation and Survey Division<br>University of Nebraska | Conservation and Survey Division<br>University of Nebraska<br>113 Nebraska Hall<br>Lincoln, NE 68588 | 2 |
| C. COPIES FOR STATE SCS OFFICES, BY LOCATION.<br>STATE OFFICE | USDA - Soil Conservation Service<br>Federal Building, Room 345<br>100 Centennial Mall N., Box 82502<br>Lincoln, NE 68501 | 300 |
| AREA OFFICE | | |
| FIELD OFFICE | SCS Field Office<br>308 North Broadway<br>P.O. Box 46, Hartington, NE 68739 | 100 |
| OTHER (specify) | | |
| D. COPIES FOR USE BY SCS NATIONAL OFFICE | 250 | 300 |
| E. TOTAL SCS ORDER. ADD ITEMS I A-D. | 715 | 442 |

II. CONGRESSIONAL ORDER.

A. MEMBERS OF CONGRESS CONTACTED AND NUMBER OF COPIES THEY ORDERED:

| | | |
|---|---|---|
| SENATOR | Edward Zorinsky | 25 |
| SENATOR | J. James Exon | 25 |
| REP. (district) | Douglas Bereuter | 100 |

B. DISTRIBUTION OF CONGRESSIONAL COPIES. CHECK OR COMPLETE ITEMS AS APPLICABLE.
CONGRESSMEN (Senators and Representatives) HAVE BEEN CONTACTED AND HAVE AGREED TO GIVE...
1250 COPIES TO LOCAL NRD FOR DISTRIBUTION AND USE.
_____ COPIES TO EXPERIMENT STATION OR EXTENSION SERVICE FOR DISTRIBUTION AND USE.
_____ COPIES TO INDIVIDUALS MAKING SPECIFIC REQUESTS TO THEIR OFFICES.
_____ COPIES TO _____

| III. EXTRA SOIL MAPS (unbound) FOR SCS. | SHIPPING ADDRESS OF SCS OFFICE | NO. COPIES |
|---|---|---|
| A. SETS OF COMPLETE SOIL MAP AS IN PUBLISHED SOIL SURVEY. | SCS Field Office | 100 |
| B. SETS OF COMPLETE SOIL MAP WITHOUT PHOTOMOSAIC BACKGROUND. | 308 North Broadway | 100 |
| C. SETS OF PHOTOMOSAIC BASE. | P. O. Box 46 | 100 |
| D. COPIES OF GENERAL SOIL MAP WITH COLOR TINTS. | Hartington, NE 68739 | 100 |
| E. COPIES OF GENERAL SOIL MAP WITHOUT COLOR TINTS. | | 100 |

DO NOT WRITE IN THIS BOX
TOTAL SCS (USDA) ORDER FOR GPO: ~~4425~~ 4,315
SIGNED: William L. Shelton DATE: 11/30/82
SOIL SURVEY AND ~~CORRELATION~~

SIGNED: STATE CONSERVATIONIST
DATE 12/19/8

## AGRICULTURE ROOTING OUT DIRT BOOKS

[From the Washington Post, Aug. 28, 1985]

By Ward Sinclair
Washington Post Staff Writer

In the basement of the Agriculture Department's massive South Building, clerks are combing the files and loading up the dumpsters in one of the department's more unusual excursions into cost-cutting.

To save storage and mailing expenses, officials are junking thousands of copies of county soil profiles that cost the government large amounts of money to produce and publish. One clerk estimated that 40,000 surveys, some as thick as Washington-area telephone books, will be dumped.

County soil surveys and maps, many of them quite complex and scientific, are vital tools to farmers, developers, land appraisers, home builders, engineers and recreation planners in determining what can be done on which soils. Over the years, the department has compiled surveys for 1,908 counties.

The department's decision to dump the documents does not mean they will become extinct, however. Copies will be available to the public in state capitals.

The survey trashing was ordered by the Soil Conservation Service, which oversees the compilation and distribution of the documents. The division decided that it would be the most cost-effective way of solving a budget problem.

Dwight Treadway, SCS public information chief, said the agency would save $67,000 a year by giving up the storage area, for which it is charged "rent" by the General Services Administration. He said the space, for which the USDA pays $16 a square foot, could then be used by the agency for other purposes.

"We have kept a supply of the county surveys here to fill the 800 to 900 requests we have had from members of Congress and the general public," Treadway said.

"But we calculated that storage was costing us $75 per publication [distributed]. It didn't make sense to me to do this, because the states are maintaining files of the same documents."

Why not just send the surplus soil surveys out to the respective states rather than junk them?

"We figured that it would have cost us $57,000 to send them to the states. We gave agencies like the Environmental Protection Agency, the National Agricultural Library and the Army Corps of Engineers a chance to get what they wanted and they have taken some copies."

But the rest are destined for a landfill or an incinerator.

Treadway said the decision will save money and improve SCS service and assistance at the local level. He said individuals seeking county soil guidance now will be able to deal directly with SCS scientists in the field.

Which could work very well—as long as they don't run short of soil surveys.

## Letter From Joint Committee on Printing

March 14, 1986

Dear Colleague:

The sequestrations mandated by the Gramm-Rudman-Hollings Act (P.L. 99-177) for FY 1986, will have a substantial effect on the printing and distribution of Congressional publications. The Congressional Printing and Binding line item of the Legislative Branch Appropriations will suffer the same 4.3% cutback in funding as other areas of government. I regret to advise Members that these cutbacks will necessitate sizable reductions in the numbers of printed copies of the Congressional Record, committee prints, hearings, and other types of Congressional publications. The Joint Committee on Printing intends to protect and preserve the tools necessary for the proper functioning of the legislative process and has attempted to make these reductions as painless as possible.

Although the details of implementation of many of the necessary reductions have not been finalized, the following list of actions should be expected in the near future:

-- The delivery of copies of the Congressional Record to Members' residences, either by GPO messenger or by mail, will be eliminated.

-- The number of Soil Surveys, prepared by the Department of Agriculture for distribution to Members, will be cut in half.

-- House Business Calendars will be reformatted. Full information will be printed once each week, with only updates printed daily.

-- The numbers of copies of both House and Senate Business Calendars will be reduced by approximately one-third.

-- The numbers of documents, bills and reports available from the House and Senate Document Rooms for Congressional distribution will be substantially reduced. The general premise will be that such copies will be available only to Members and staff of Congress. The public will be referred to the GPO bookstores to purchase desired items.

-- Authorization for overtime work for GPO employees detailed to work with Congressional committees will be drastically reduced, and possibly eliminated.

-- The format of committee reports will be standardized to eliminate non-essential introductory matter.

-- Legislative Calendars produced by committees will be standardized and printed only once, at the end of each session of Congress, rather than quarterly or bi-annually as is now the case.

-- The number of copies of the daily Congressional Record delivered to committees will be drastically reduced.

-- The numbers of copies of committee hearings and committee prints will be cut by at least one-half.

Again, copies delivered to committees should be only for the use of Members and staff of Congress. The general public should be referred to GPO to purchase copies.

-- The process by which committees may order additional copies of hearings and committee prints through the Joint Committee on Printing will be changed. All such requests must be made and justified, in writing, by the requesting Chairman.

Members should note that these changes are necessary to meet specific dollar figures mandated by Gramm-Rudman-Hollings just for Fiscal Year 1986. Further, more substantial cuts may be anticipated for Fiscal Year 1987, beginning in October. All Members can help ease these cuts if efforts are made to reduce costs in other ways. For example, the costs of preparing and printing each page of the Congressional Record are substantial. Withholding extraneous, non-legislative matter from the Record could save a great deal of money. As a further example, committee chairmen could instruct staff to be more conservative on the formatting, types and amounts of materials included in committee hearings. The Committee will shortly convene a briefing for staff to further expand upon this matter.

In addition to the above-mentioned changes, the committee will continue to work towards identifying efficiencies that will achieve additional savings and cost avoidances. We will seek ways in which technology can be applied to the printing process, both at GPO and in Congressional offices, to expedite publishing while reducing costs. We will welcome any suggestions that you may have toward these ends.

Sincerely,

Frank Annunzio
Frank Annunzio
Vice Chairman

Charles McC. Mathias, Jr.
Charles McC. Mathias, Jr.
Chairman

## American Farm Bureau Federation

## STATEMENT OF GRACE ELLEN RICE, ASSOCIATE DIRECTOR, WASHINGTON OFFICE

Senator Abdnor. Our next witness is Ms. Grace Ellen Rice, associate director of the Washington Office for the American Farm Bureau.

Welcome to the committee, Ms. Rice.

Ms. Rice. Thank you, Mr. Chairman.

Senator Abdnor. Please proceed.

Ms. Rice. I will just summarize the remarks this afternoon. We do appreciate the opportunity to be here and offer our testimony.

The policy that we present to you has been developed by our farmers and ranchers at the local level, which then works its way up through the State and national organization. It reflects the continuing problem that we've had for the past few years in agriculture.

We continue to find ourselves in rather serious economic difficulty, and for that reason we encourage the Congress to provide adequate

USDA funding this year, and we are also encouraging the USDA to implement the farm bill in such a way that it does address both our long-term and short-term agricultural needs.

I would like to first of all give you an overview of Farm Bureau's budget policy. Gramm-Rudman-Hollings has been rather controversial, but I wanted to say at the outset that we did support Gramm-Rudman-Hollings, because we think that it's the best opportunity or structure to try and regain control of Federal spending. We think that its budget target, its deficit target of $144 billion can be met in several ways.

The way that we encourage the Congress to consider is to enact a spending freeze with selected reductions in certain portions of the Federal Government. We, in agriculture, have viewed the Gramm-Rudman-Hollings cuts of 1986 as working a disproportionate share of cuts on agriculture. If you look at the 1986 Gramm-Rudman-Hollings effects, you will see that agriculture, while it is only around 8 percent of the domestic budget, bore about 22 percent of the domestic cuts in those 1986 automatic reductions.

We accounted for almost 28 percent of the sequesterable domestic spending. One of the reasons that we had a higher percentage there was because of the exclusion of many entitlement programs, such as Social Security, from the effects of Gramm-Rudman-Hollings.

With regard to the USDA budget as a whole, I think that we have reviewed it and noticed the significant cuts in areas like conservation, animal and plant health and welfare, the Extension Service, and also significant drops in funding for the Animal Damage Control Program, which was recently transferred from the Department of the Interior to the USDA. These kinds of cuts do concern us, and we are asking the committee to consider a spending freeze for the programs that have been eliminated or substantially reduced in production agriculture.

We would ask that you consider bringing them back up to the 1986 level. Unless that's done, I think we are going to have more and more problems in agriculture.

We also would like to say that there are probably dozens and dozens of USDA programs that deserve our individual comment. But because there are so many, we haven't commented on them. Some of the traditional programs that we always ask the committee to consider full funding for are the APHIS programs such as imported fire ants, brucellosis eradication, boll weevil eradication, those things that directly affect our producers.

In conclusion, I again want to say that we do encourage Congress to meet the targets of Gramm-Rudman, because we know that unless it does we may be faced with some substantial automatic cuts in the fall. We would like to avoid that if at all possible.

We appreciate being here today and would be glad to answer questions or furnish you more information.

Senator ABDNOR. Well, we certainly appreciate your coming here. The Farm Bureau certainly has a reputation of representing agriculture in Congress, and your thoughts are well taken.

We all know—at least, a lot of us—that Gramm-Rudman-Hollings has a downside, and that is that there are just too darn many things put on the exempt list which means other areas take more than their fair share of the cuts. No one can quarrel with that. The way we overcome that is by establishing our own priorities and meeting the goal without having to resort to the Gramm-Rudman and the sequestering that goes with it.

Have you had a chance to look over the budget resolution that passed the Senate?

Ms. RICE. The budget resolution that passed the Senate was not supported by our membership, because it did include about $11 billion in tax increases. Our members have been very staunch in saying, "We don't want any more taxes."

I think that it's viewed as just another way for spending to increase, so we didn't support the budget resolution.

Senator ABDNOR. Well, maybe the next thing we are going to ask is where we should find those cuts to put the money back in agriculture. I mean, that's where the problem is, as we all well know.

Ms. RICE. I agree with you, and I see your point on that. But, we had taken some of the figures from the President's 1987 budget and figured that if you could take the projected outlays for—excuse me, the projected revenues for 1987, which I think was—it's mentioned here in the statement, but the projected revenues for 1987 which I believe was $850 billion, and then apply that to a frozen spending level of 1986 which was $980 billion.

Senator ABDNOR. Well, you see, I would give you trouble on that, because as much as I am a farmer and my whole State is agriculture, that budget knocked out about 800 people in Customs that are fighting the drug issue down there, and you add another 700 to it, or 1,000, we would have had about 1,700 less people fighting the drugs.

Each item is a priority. Across-the-board is not my favorite way of trying to find bucks, because there are some things—and I certainly include from my own perspective, agriculture as one of the real important things. But I also think that keeping drugs out of this country is pretty important, too.

Ms. RICE. Well, I don't think the Farm Bureau has a position on that. But I certainly agree with you.

Senator ABDNOR. Thank you. I had better keep moving here. It's a pleasure to have you here.

Ms. RICE. OK. Thank you very much.

[The statement of Ms. Rice follows:]

## STATEMENT OF GRACE ELLEN RICE

Mr. Chairman and members of the Subcommittee, Farm Bureau appreciates the opportunity to present testimony on the FY 1987 budget request for the U.S. Department of Agriculture (USDA).

The American Farm Bureau Federation is the nation's largest general farm organization with a membership of over 3.4 million families in 49 states and Puerto Rico. Farm Bureau members produce almost ~~every type~~ of commodity grown commercially in this country. Our policy is developed by the producer members at the county, state and national levels of the organization. The recommendations of Farm Bureau's Commodity Advisory Committees supplement Farm Bureau policy and, in part, form the basis for our position on funding levels for specific USDA programs.

Farmers and ranchers continue to find themselves in serious economic difficulty. Agriculture remains in a severe adjustment period due in part to excess supplies of most farm commodities caused by weakened domestic and world demand and protectionist positions taken by some of our trading partners. Export values continue to decline and are expected to decrease from $31 billion in FY 1985 to $28 billion in FY 1986, down from an all-time high in FY 1981 of $44 billion. Soft domestic and export markets coupled with agricultural credit problems make it incumbent upon Congress to provide adequate USDA funding in 1987 and for USDA to implement the Food Security Act of 1985 to address agriculture's short- and long-term market and income needs.

### Overview of Farm Bureau's Budget Policy

Farm Bureau supported the enactment of the Balanced Budget and Emergency Deficit Control Act of 1985 (Gramm-Rudman-Hollings) because it represented the best opportunity to regain control of federal spending. We are committed to meeting its 1987 deficit target of $144 billion through a spending freeze and selected reductions rather than tax increases. At the same time, we urge Congress to correct a major flaw in Gramm-Rudman-Hollings which is its failure to subject all government spending programs, especially entitlements, to spending cuts. The exemption of these so-called uncontrollable programs causes budget cuts to fall disproportionately on discretionary spending areas, many of which are in USDA.

To elaborate on the disproportionate share of spending cuts that certain programs face because of the exemption of major entitlement programs, consider the effects of the FY 1986 Gramm-Rudman-Hollings automatic reductions. Gramm-Rudman-Hollings FY 1986 spending cuts of $11.7 billion came from $105 billion in domestic spending and $109 billion in defense spending. The cuts, which represented a 4.3 percent reduction in domestic spending and a 4.9 percent reduction in defense spending, were split almost evenly with cuts of approximately $6 billion in each area. USDA spending subject to cuts was $29 billion or almost 28 percent of the sequesterable domestic base. Because certain domestic programs were exempted from any reduction (e.g., Social Security, veterans and railroad retirement), the uniform cuts fell harder on areas such as USDA which were subject to automatic reductions. The 4.3 percent reduction in USDA baseline spending translated into a $1.3 billion cut for agriculture. USDA cuts represented 11 percent of total reductions or approximately 22 percent of domestic cuts. In comparison with the federal budget as a whole, USDA outlays are 6 percent of total federal spending and 8 percent of non-defense spending (U.S. Budget in Brief, FY 1987).

Our attention now has shifted to the FY 1987 budget and how the Gramm-Rudman-Hollings requirements will be met. There is widespread concern that unless Congress and the President enact a budget that meets the deficit target, automatic spending cuts of at least 20 percent will go into effect next fall. This would be disastrous for agriculture, and we encourage the Subcommittee to consider a budget based upon a freeze in total federal spending--no exceptions other than interest on the national debt. Furthermore, all federal programs must be examined for reductions. By freezing federal outlays at the 1986 level of $980 billion and offsetting them with projected 1987 revenues of $850 billion, the resulting deficit of $130 billion would be clearly within the deficit target set by Gramm-Rudman-Hollings. It is significant that the target can be met without tax increases.

FY 1987 USDA Budget Overview

Farm Bureau's concerns about the FY 1987 USDA budget are virtually identical to those expressed in previous years to the Subcommittee. Principally, the allocation of proposed USDA funding is neither equitable nor wise because the Administration's budget request produces significant cuts in or the elimination of many farmer supported programs. Examples of substantial cuts occur in soil conservation, extension, animal and plant health, and animal damage control which was recently transferred from the U.S. Department of Interior to the U.S. Department of Agriculture.

In reviewing the USDA budget at its March meeting, the American Farm Bureau Federation Board of Directors voted to take the following actions with regard to the FY 1987 agricultural budget. Farm Bureau:

(1) Reaffirms its commitment to meeting the deficit target of $144 billion in 1987 through spending reductions. Farm Bureau emphasizes the desperate need to subject all government spending programs, especially entitlements, to spending cuts.

(2) Will work with the Congress through its budget and appropriations process to develop a package of spending cuts that meets the $144 billion target without the severe cuts and program terminations called for in the President's 1987 budget.

(3) Urges a spending freeze, rather than reductions, in extension, conservation, and Animal and Plant Health Inspection Service activities because they have a direct bearing on production agriculture. It is expected that government agencies with responsibility for these activities will place highest priority on programs relating to the development, production, and marketing of commodities and livestock and the preservation of farmers' soil and water resources.

(4) Opposes the proposal to eliminate conservation cost-sharing in 1987 and rescission of 1986 funds.

(5) Supports the reductions, termination and transfers of programs, such as Farmers Home Administration community development, that have no direct bearing on production agriculture and are low priority items to farmers during this budget crisis.

(6) Supports the proposal to reduce federal funding for administrative/operating expenses for the Federal Crop Insurance Corporation and the premium subsidy.

Farm Bureau policy supports the imposition of user fees if principal benefits of the program accrue to the producer. We oppose the imposition of user fees on producers who are required to comply with federally mandated programs which provide primary benefits to consumers or the general public.

We recognize that there are dozens of USDA programs which deserve individual comment but believe that our support of a government-wide spending freeze best addresses the goal of fiscal responsibility within each program. At a time when agriculture is faced with the allocation of a limited supply of federal dollars, we emphasize that the interests of Farm Bureau members rests with the needs of production agriculture.

During the year of the spending freeze that we are recommending to the Subcommittee, Farm Bureau urges a thorough review of all USDA programs to determine which ones are high priority areas and those with lesser priorities whose goals either have been accomplished or whose usefulness and need have been outlived. This examination will make it possible to reallocate money when agricultural spending emergencies arise.

In conclusion, Farm Bureau urges Congress to adopt a budget and enact appropriations bills that will meet the deficit target of Gramm-Rudman-Hollings. Unless Congress does, USDA programs and farmers and ranchers throughout the country will continue to shoulder an unfair share of spending cuts.

We appreciate the Subcommittee's consideration of our statement and ask that it be made part of the hearing record.

## CENTER FOR BUDGET AND POLICY PRIORITIES

### STATEMENT OF ROBERT GREENSTEIN, DIRECTOR

Senator ABDNOR. Our next witness is Mr. Robert Greenstein, director of the Center on Budget and Policy Priorities. Maybe he can clear all of this up for us on the budget priorities.

It's a pleasure to have you with us.

Mr. GREENSTEIN. Thank you. It's a pleasure to be here.

The center is a nonprofit research and analysis organization that focuses on Federal issues affecting low-income Americans. I would like to focus today on the food assistance programs in the FNS budget.

The message that I bring is basically a simple one, which is that I think the subcommittee has the opportunity this year to meet some key needs in the low-income food and nutrition area, while at the same time coming in below what the Senate budget resolution assumes for the food assistance programs.

Let me start with food stamps. In the food stamp area, the USDA current services estimate is $11.8 billion or $400 million below the CBO current services estimate. The Senate budget resolution knocked roughly $200 million off the CBO estimate by assuming a 2-percent COLA, but there is still a $200 million difference between the Senate budget and the USDA current services estimate.

Now, the first thing one notes about the USDA current services estimate is that there is about $170 million in savings from assumed error-rate collections that CBO and virtually all independent observers believe will not materialize next year. But, on the other hand, it now looks as though even the 2-percent assumption in the new Senate budget is likely to be too high.

The Thrifty Food Plan, as of March, is barely up over last June's Thrifty Food Plan. It doesn't look like we are going to have even a 2-percent Thrifty Food Plan COLA; it also looks like CBO is probably a little too high on the standard deduction and shelter deductions.

The bottom line is that although the administration was, I believe, a little less than responsible in assuming these large savings for error-rate collections that will not occur next year, it now looks possible that the USDA current services figure of about $11.8 billion may actually be on the mark. By the time you markup, you will have a few months more of current data.

I suspect that you probably will be able to use that, and that will give you $200 million of room relative to the Senate budget.

Now, I'm not proposing to then redistribute the $200 million to lots of other areas, on the whole—just a few very minor parts of it. Let me move then to a couple of other areas, and then I will tie back in with this.

### PUERTO RICO BLOCK GRANT

The next is the Puerto Rico block grant. In 1981, the administration proposed that the Food Stamp Program be ended in Puerto Rico and replaced with the block grant at $825 million, which is what the administration said was needed to provide nutrition assistance to poor people in Puerto Rico in 1982.

Since then, the block grant has been frozen every year at $825 million except for this year when it's a little below that due to the six-tenths of 1 percent across-the-board cut in the continuing resolution. But, since 1982, food prices have continued to rise in Puerto Rico, and unemployment is now over 20 percent there.

To deal with this, last year's farm bill provides about $853 million for Puerto Rico in 1987 by a partial inflation adjustment. And while he didn't support this provision, even Senator Helms did state during the conference that he could understand the arguments in favor of it and thought it had more merit than any other Food Stamp Program restoration under consideration in the conference.

The conferees on the farm bill thought they had drafted that in such a fashion that the new levels were mandatory. But, because they and a number of other observers, including myself, did not understand the way in which the appropriations structure, with the separate appropriation accounting, interacted with the farm bill, it turned out not to be mandatory. So, it's up to the Appropriations Committee to decide.

The administration is proposing to freeze the block grant for a sixth straight year at $825 million. Based on CBO data, this would result in a drop of one-sixth in food purchasing power since the block grant was instituted in 1982, and nearly one-third since 1981 before the block grant was implemented.

Unlike in the United States, Puerto Rico has already slashed income limits well below the poverty line and cut benefit levels well below those in the United States, although food prices are nearly as high. I think further cuts in food purchasing power should be avoided there.

Now, the Senate budget does assume an inflation adjustment for the Puerto Rico block grant. The number in the Senate budget is very close to the number in the Food Security Act of 1985. Given that there are not pressures elsewhere on the FNS side—there is already a $200 million margin most likely in Food Stamps, as I mentioned—I would very much hope that the subcommittee could put in the figure that the Food Security Act contains of $852,750,000.

### WOMEN, INFANTS, AND CHILDREN PROGRAM

Turning now to the WIC Program. There are two issues I would like to address: supplemental needs in 1986 and appropriations levels for 1987.

As I'm sure you know, the supplemental bill pending before the House contains $20 million in supplemental funding for WIC for 1986. I believe this is very much needed and would hope the Senate Appropriations Committee would act favorably on it.

Last year, CBO estimated that maintaining current services in WIC would cost $1.57 billion, and both the House and Senate appropriated that amount. States assumed that amount and acted accordingly throughout the early months of fiscal 1987.

Then, unexpectedly in December at the last minute, there was the six-tenths of 1 percent across-the-board cut. That removed $10 million from WIC.

The second unexpected event occurred in February when the infant formula companies all raised their prices in tandem for the second time in 10 months. They raised them more than inflation, with the result that infant formula prices are expected to average nearly 7 percent higher in 1986 than 1985—nearly twice the inflation rate.

Since infant formula constitutes nearly 30 percent of WIC food costs, this raises the price of maintaining the WIC caseload.

As a result of these two developments, there is not enough money now to maintain WIC caseloads through the rest of the year. WIC participation has been at a steady 3.3 million in all months from October through February. Both our estimates and those of USDA indicate that the funding is sufficient to support a caseload of only 3.2 million, so that somewhere in the vicinity of 100,000 women, infants and children would have to be dropped in the coming months if no additional funds are provided.

A few weeks ago, we conducted a check of selected States and found that three had already instituted cuts: Arizona, New Mexico, and Texas. A number of others will have to institute cuts in the months ahead in the absence of a supplemental. Another, I gather there, is South Carolina.

The $20 million supplemental would offset the effects of the six-tenths of 1 percent cut and the higher-than-anticipated formula increases, and allow caseloads to be maintained. I think this is particularly important in light of the new USDA national evaluation of WIC, which came out in January, and found that WIC really does produce stunning results.

The USDA medical evaluation found that WIC reduces late fetal deaths by between one-fifth and one-third, substantially reduces prematurity rates, increases head circumference in infants born to WIC mothers, larger brain size, and a number of other positive outcomes. There are few programs in the entire Federal Government that now have a demonstrated track record from a rigorous study such as this one producing such dramatic results.

We are serving only about half of those eligible for WIC now. I would certainly hope we don't reduce the caseload.

For 1987, USDA has requested $1,617,000,000. The OMB current services level is $1,632,000,000. I would hope at a minimum that the $15 million would be put back.

I just learned this morning that the budget unveiled today by the caucus of the House Budget Committee actually, as a result of the new WIC study, has an initiative and assumes WIC at $1,687,000,000. I recognize that it's probably not likely that the Appropriations Committee on either side will go that high and, of course, we don't know what the final number will be in conference on the budget. But, I hope again, especially considering what appears to be a $200 million dividend in food stamps, I hope the committee would give serious consideration to some modest increment in WIC over the current services levels.

## COMMODITY SUPPLEMENTAL FOOD PROGRAM

A final area I would like to discuss is the Commodity Supplemental Food Program. Here, the issue is not the appropriations level, but some issues on how the program is being run. In the Food Security Act last year, Senator Boschwitz in the Senate and Congressman Panetta in the House proposed some modifications that were enacted to improve the operation of the program.

Really, they were designed to assure that the appropriations were more effectively used. In the past, USDA has taken the appropriation, figured the number of people who could be served, allocated caseload ceilings among existing projects accordingly, with the result that some projects got caseload ceilings far in excess of the number of people they could serve. At the same time, requests for new projects or for existing projects to serve low-income elderly were turned down on the grounds that all available funds were committed.

The Food Security Act was designed to change this. It required that caseloads be set at levels which projects could reasonably be expected to serve, and that USDA should then take any additional caseload capacity to approve new projects or allow existing projects to serve the elderly within the existing appropriation. This was not a mechanism to increase appropriations for the program.

Instead, USDA has essentially stood these provisions of the Food Security Act on their head and is now effectively cutting the program by administrative action. It has done two things in particular.

First, it has taken the nonfat dry milk and rice that are in surplus that were donated to the program in the past and, in a highly unusual move, transferred nearly $4 million from the appropriation to the Commodity Credit Corporation to pay for surplus items already in CCC stocks. In conference report language earlier this year, this committee and the House committee directed USDA not to make the transfer. USDA has ignored that directive.

Second—and this I believe is a new development we just finished analyzing last week—USDA informed States in late March of newly authorized caseload ceilings for fiscal year 1986. While the caseloads did need to be reduced in some areas to free up excess slots for new projects or for the elderly, what USDA did was to cut caseloads so deeply that in 8 of 18 CSFP states, maximum caseload ceilings for 1986 were set below the average participation levels for 1985.

I would add that South Dakota is one of the States that was adversely affected. It's one of the eight where the new caseload ceiling for 1986 is below the average participation for 1985. In fact, in 11 of the 12 months of 1985 the South Dakota projects served more people than the maximum caseload ceiling just alloted to the project for 1986.

USDA set ceilings for 1986 on October and November participation, whichever was higher, ignoring that those months, can often be low participation months and ignoring the actual participation throughout fiscal year 1985. Then, to add insult to injury, instead of taking the freed-up funds from other caseload, and as the Food Security Act would appear to require, using those caseload slots to fund new projects or to allow some elderly in, USDA took all the money freed up and dumped it into the CCC account through the transfer.

So, rather than attempting to meet congressional intent and to reach the maximum number who can be served within the existing appropriation, USDA has effectively reduced the appropriation through this highly unusual transfer.

To remedy this, the supplemental appropriations bill pending in the House requires the $3.9 million to be transferred back to the CSFP account. I would hope the subcommittee here would retain this language and take two additional steps: One, to direct USDA to revise its caseload ceilings and to set them at levels that projects might reasonably be expected to serve based on participation throughout 1985 and 1986 to date, not just 2 months; and, two, to write into the statute for the 1987 bill a requirement that none of the 1987 funds be transferred to the CCC.

## CONCLUSION

In conclusion, let me just mention again that in all of these areas, I think the needs can be met while coming in again below the Senate budget. In Puerto Rico, the level involved in the Food Security Act is within $5 or $6 million of the level assumed in the Senate budget. In WIC, I would hope the committee could go somewhat higher, but that may be covered in the final budget resolution.

On the other hand, that should be more than offset by what appears to be $200 million lower that you need in food stamps below the level in the budget.

We have the happy and unique opportunity in terms of the last several years of, I think, being able to meet all the critical needs and still come in below the resolution.

Thank you.

Senator ABDNOR. Thank you, Mr. Greenstein. I wanted to take a little time for questions, but I guess we went over our time limit here.

But it was a very fine document, and I'm sure the committee will take it under advisement. Thank you for your interest and concern. I appreciate your attendance here today.

Thank you.

Mr. GREENSTEIN. Thank you.

[The statement of Mr. Greenstein follows:]

## STATEMENT OF ROBERT GREENSTEIN

Mr. Chairman, I appreciate the opportunity to appear before the Subcommittee this afternoon. I am Robert Greenstein, director of the Center on Budget and Policy Priorities. The Center is a non-profit research and analysis organization that focuses on federal budget and policy issues affecting low income Americans.

I would like today to discuss several issues relating to the budget for the Food and Nutrition Service. As you know, FNS programs have long been a particular interest of mine. In 1977 and 1978, I served as Special Assistant to Secretary Bergland, specializing in domestic food assistance issues. In 1979 and 1980, I served as Administrator of FNS.

Before getting into a discussion of various appropriations issues affecting FNS, I would like to commend the Subcommittee and the Chairman for the leadership you have shown in recent years in charting a fair and reasonable course regarding appropriations for the FNS programs. Unnecessary disruption and unwise reductions have been avoided on several occasions due in no small part to your work.

### I. FOOD STAMP ISSUES

I would like to turn first to food stamp issues. For FY 1987, the Administration has requested $11.5 billion, a $300 million cut from the USDA current services estimate of $11.8 billion. CBO, on the other hand, has a current services estimate of $12.2 billion, or $400 million more than the USDA current services estimate. The new Senate budget resolution contains $12.05 billion for food stamps, a level that was derived by taking the CBO estimate and reducing it by assuming a 2% food price increase.

In short, the USDA current services estimate is about $200 million below the Senate budget level. Most of this difference is accounted for by an OMB assumption that $170 million in error rate sanctions will be collected in FY 1987. This is an assumption with which virtually no independent analyst concurs.

To date USDA has collected no more than $5 million in sanctions for all years since FY 1981. To collect $170 million, USDA would have to collect next year all outstanding sanctions from FY 1981 through FY 1984, as well as a significant portion of the FY 1985 sanctions.

The outstanding sanctions from 1981 to 1983 are all in appeal or litigation. The 1984 sanctions were just announced -- the administrative appeal process hasn't even started yet. The 1985 sanctions probably won't be announced until after FY 1987 is under way.

CBO has stated that it expects no sanctions collection of any magnitude in FY 1987 or 1988, and virtually all knowledgeable observers concur with CBO on this point. USDA's assumption of collections in FY 1987 is not realistic.

Despite this fact, it is still quite conceivable that the USDA current services estimate could turn out to be be on the mark. CPI data through March indicate that the "thrifty food plan" adjustment for FY 1987 could actually be 1% or less, rather than 2%. Similarly, the adjustment in the standard and shelter deductions are likely to be smaller than CBO has forecast. It is still possible that very low inflation could offset the unrealistic USDA assumptions regarding sanction collections -- and could turn a less-than-responsible budget estimate into a relatively accurate number.

In determining how to handle the food stamp appropriation this year, I hope the Subcommittee will take one other factor into account. Providing a sufficient food stamp appropriation level takes on added significance this year because of Gramm-Rudman-Hollings. There is now more danger in appropriating too little for food stamps -- because under Gramm-Rudman-Hollings, supplementals are now more difficult to pass. Supplemental appropriations bills must be deficit neutral (unless the deficit for the year is under the Gramm-Rudman-Hollings target) -- and consequently, supplementals must be "paid for" through offsetting cuts. If several hundred million dollars is needed next summer for a food stamp supplemental, it may prove difficult at that late date to find several hundred million dollars in FY 1987 outlay savings somewhere in the federal budget. Having to pass a food stamp supplemental next spring or summer would be more chancy than it has been in recent years.

For these reasons, I would offer the following suggestions:

- Please fund the program for the full year, using current services estimates, rather than funding the program for part of the year, using the USDA budget request. The Senate budget resolution rejects the $300 million in food stamp cuts contained in the USDA budget, and the House budget resolution is certain to reject these cuts as well. Part-year funding will guarantee that a supplemental is needed next year, precisely the scenario we should all wish to avoid.

- In deciding whether to set the appropriations level at the USDA current services estimate or the level in the budget resolution, please look at the latest available CPI data. (By July, data through May will be available -- and since the food stamp benefit and deduction levels are based on the June CPI, you'll have a good sense of where these levels will be).

- As noted, I think you may be able to use the USDA estimate and thereby to come in $220 million below the Senate budget resolution. If you do, there will be some risk that a supplemental will be needed. To minimize this risk, it will be important not to use the food stamp appropriation as a source for transferring funds to OIG, OGC, or the Extension Service. I would note that the Food Security Act of 1985 requires that no part of the food stamp appropriation shall be transferred to OIG or OGC.

## II. PUERTO RICO BLOCK GRANT

In 1981, the Administration proposed that the food stamp program be ended in Puerto Rico and be replaced with a block grant funded at $825 million, a significantly reduced funding level. The Administration stated that $825 million was the level needed to provide nutrition assistance to Puerto Rico in FY 1982.

Since FY 1982, the block grant has remained frozen year after year at the $825 level (and in FY 1986, it was actually reduced to $820 million, due to the 0.6% across-the-board cut in the Continuing Resolution). During this same period, food prices have continued to rise in Puerto Rico and unemployment has increased, surpassing 20%.

The Food Security Act of 1985 addresses this situation by providing partial inflation adjustments for Puerto Rico each year, starting with FY 1987. The Act provides $852,750,000 for FY 1987. Even Senator Helms stated during the conference that he could understand the arguments in favor of such an adjustment and thought it had more merit than any other food stamp restorations under consideration in the conference.

The conferees who worked on this part of the Food Security Act of 1985 believed they had drafted the Act in such a fashion that the Puerto Rico funding levels would not simply be authorization ceilings, but would rather be mandatory funding levels. The Act stipulates: "From the funds appropriated under this Act the Secretary shall...pay to the Commonwealth of Puerto Rico...$852,750,000 for the fiscal year ending September 30, 1987...."

However, the Agriculture Committees failed to take note of the fact that because the Puerto Rico block grant constitutes a separate appropriations account, the language in the Food Security Act does not have the intended mandatory effect. The Appropriations Committees can appropriate less, if they elect to do so.

Not surprisingly, the Administration is proposing to freeze the block grant for a sixth straight year at $825 million. This would result in a drop of one-sixth in food purchasing power since the block grant was instituted in FY 1982 and of nearly one-third since FY 1981, before the block grant was implemented. Puerto Rico has already slashed income eligibility levels well below the poverty line and cut benefit levels well below those in the U.S., despite the fact that food prices are nearly as high. Further cuts in purchasing power should be avoided.

I hope the Subcommittee will provide the level reflected in the Food Security Act. The Senate budget does assume an inflation adjustment for the Puerto Rico block grant.

## III. WIC

In the WIC area, there are two issues I would like to address: supplemental funding needs for FY 1986 and appropriations levels for FY 1987.

As you may know, the supplemental bill recently approved by the House Appropriations Committee contains $20 million in supplemental funding for WIC. This funding is very much needed and I hope the Senate Appropriations Committee will act favorably on it.

Last year, CBO estimated that maintaining current services in WIC would cost $1.57 billion this year, and both the House and Senate appropriated this amount. States maintained their participation levels as FY 1987 began.

Then, two unexpected events occurred. In December, $10 million was cut from WIC as part of the 0.6% across-the-board cut. And in February, the infant formula companies unexpectedly instituted their second major price rise in 10 months, with the result that infant formula prices are expected to average nearly 7 percent higher in FY 1986 than in FY 1985, an increase about twice the inflation rate. The increase in infant formula is especially important because nearly 30 percent of WIC food costs consist of infant formula costs. Sharp increases in formula prices raise the cost of maintaining the WIC caseload.

As a result, there is not enough money to maintain WIC caseloads. WIC participation was a steady 3.3 million in all months from October 1985 through February 1986 (the latest month for which national data are available). But both our estimates and those of USDA indicate that WIC funding is sufficient to support a caseload of only 3.2 million this year.

Somewhere in the vicinity of 100,000 low income pregnant women, infants, and children at nutritional risk will have to be dropped from the program if no additional funds are provided.

In a check of selected states that we conducted several weeks ago, we found at least three states that have already instituted cuts: Arizona, New Mexico, and Texas. A number of other states will have to institute cuts in the months ahead, if the supplemental fails.

The $20 million supplemental would offset the effects of the 0.6% cut in WIC and the higher-than-anticipated infant formula increases -- and allow caseloads to be maintained.

I think the need for the supplemental takes on added importance in light of the findings for USDA's recently released national evaluation of WIC. The study, which was conducted over five years, cost approximately $5 million, and is one of the most in-depth evaluations ever conducted of a federal social program, found stunning results. It documented that WIC:

- Reduces late fetal deaths by one-fifth to one-third
- Substantially reduces prematurity rates
- Increases head circumference in infants born to WIC mothers (this usually means larger brain size)
- Increases the numbers of low income pregnant women receiving adequate prenatal care and the numbers of children who are adequately immunized
- Improves diets and nutritional intakes
- Appears to result in improved cognitive performance in children

The study shows WIC to be one of the most dramatically effective of all federal programs. Yet at a caseload of 3.3 million persons, WIC is reaching fewer than half of those eligible for it. Surely this is not the time to allow the caseload to be reduced.

## FY 1987

For FY 1987, USDA has requested $1.617 billion for WIC, a level that represents a $15 million cut from the OMB current services level of $1.632 million. OMB defends the $15 million cut with the same type of arguments with which it has defended most of its proposed WIC reductions of prior years. The Congress and this Subcommittee have consistently rejected these reductions in the past, and I hope that the same course will be followed this year.

I would urge the Subcommittee to appropriate no less than the OMB current services estimate of $1.632 billion for WIC. If possible, I would hope that the Subcommittee could appropriate a somewhat larger amount, in the light of the important findings of the national WIC evaluation. We really should be gradually expanding WIC to reach an increasing proportion of the low income women, infants, and children who are eligible and in need.

## IV. COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP)

Last year, in enacting the Food Security Act, the Congress adopted a series of provisions offered by Senator Boschwitz (and by Rep. Leon Panetta in the House) designed to improve the operation of the Commodity Supplemental Food Program (CSFP). The provisions were designed to assure that CSFP appropriations are more efficiently used.

In past years, USDA has taken the CSFP appropriation, figured the number of people who could be served, and allocated caseload ceilings among existing CSFP projects. Some projects received caseload ceilings far in excess of the number of persons they could serve. Meanwhile, applications for new CSFP projects and requests from existing projects to utilize unused caseload to serve low income elderly persons were turned down -- on the grounds that all available funds had been committed.

The Food Security Act was designed to change these allocation practices. It required that caseloads be set at levels that projects could reasonably be expected to serve and that USDA should then use additional caseload capacity to approve new projects or to allow existing projects to serve low income elderly persons.

Nevertheless, USDA has stood these provisions of the Food Security Act "on their head" and is now cutting the CSFP program by administrative action. The following steps have been taken:

- In the past, surplus non-fat dry milk and rice were donated to CSFP from the stocks of the Commodity Credit Corporation. Now, in a highly unusual move, FNS has taken $3.95 million from the CSFP appropriation and transferred it to the CCC to "pay for" these items, despite the fact that CCC already has them in surplus. In conference report language accompanying the CCC supplemental earlier this year, the Appropriations Committees directed USDA not to make this transfer, but USDA has ignored the directive.

- In addition, USDA informed states in late March of new authorized caseload ceilings for CSFP. While caseloads did need to be reduced in some areas in order to "free up" excess caseload slots for new projects or for the elderly, USDA cut caseloads so deeply that in 8 of the 13 CSFP states, maximum caseload ceilings for FY 1986 were set below average actual participation levels for FY 1985. In addition, the funds "freed up" when caseloads were cut were not used to start any new projects or to serve any new elderly persons, but rather were transferred to the CCC.

In essence, what USDA did was to reduce caseloads to such an extent that a number of projects will have to take women, infants, and children off the program -- and then to take all the funds recaptured and to dump these funds into the CCC.

Rather than attempting to meet Congressional intent and to reach the maximum number of persons who can be served within the CSFP appropriation, USDA has effectively reduced the appropriation through this highly unusual funding transfer.

To remedy this situation, the supplemental appropriations bill passed by the House Appropriations Committee requires the $3.95 million in FY 1986 funds to be transferred back from the CCC to the CSFP account. I would strongly urge the Subcommittee to retain this language and to take the following additional steps.

- To direct USDA to revise its caseload ceilings and to set them at levels that projects might reasonably be expected to serve (based on FY 1985 participation and FY 1986 participation to date).

- To write into the statutory language of the FY 1987 appropriations bill a requirement that none of the CSFP funds may be transferred to the CCC.

V. ELDERLY NUTRITION

Finally, I would urge the Subcommittee to assess carefully the FY 1987 funding needs for the elderly nutrition programs. The requested FY 1987 level is certain to be insufficient, as it is based on an FY 1986 level that includes a rescission Congress is not approving. I would hope that a current services appropriations level would be provided here.

CONCLUSION

While I've identified a number of funding needs here, I would like to close by noting that these needs can be met with less than is assumed for FNS programs in the new Senate budget resolution.

I expect the Senate resolution level for food stamps to exceed the need -- and I believe the same may hold true for child nutrition as well. For FY 1986, USDA overestimated child nutrition needs by about $175 million, and the food price inflation forecast used to predict child nutrition reimbursement rates for FY 1987 are also likely to be too high. Through use of more current inflation data, the Committee should be able to come in at least $100 million (and possibly as much as $250 million) below the Senate budget estimates for food stamps and child nutrition.

Moreover, the Puerto Rico level discussed here ($852.75 million) is very close to the level assumed in the Senate budget. (The Senate budget assumes about $850 million for Puerto Rico, not the $825 million requested by the Administration.)

To provide some increased funding for WIC (or at a minimum, the $1.632 billion OMB current services level) and to provide a current services level for elderly feeding will entail only modest amounts of funds. The CSFP recommendation made here -- to bar a funding transfer -- has no cost.

Thus, the Subcommittee has the opportunity to meet vital food and nutrition needs of the low income population while coming in below the Senate budget resolution totals for the FNS programs.

## PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

### STATEMENT OF JOSÉ A. ORTIZ-DALIOT, DIRECTOR

Senator ABDNOR. Our next witness is Mr. José A. Ortiz-Daliot. He is the director of the Puerto Rico Federal Affairs Administration.

Welcome to the committee. Go right ahead.

Mr. ORTIZ-DALIOT. Thank you, Mr. Chairman. Before I commence, I would like to thank Mr. Robert Greenstein. He basically made our case, and we want to thank him for the support and efforts on behalf of the people of Puerto Rico.

My name is José A. Ortiz-Daliot. I am director of the Puerto Rico Federal Affairs Administration here in Washington. I welcome this opportunity to present testimony on behalf of the low-income citizens of Puerto Rico with respect to the fiscal year 1987 funding appropriation for the Puerto Rico Nutrition Assistance Program block grant.

Last year, the Senate and House Agriculture Committees, recognizing the inequity of the $825 million ceiling on the NAP program over the last 5 years, approved legislation—the Food Security Act of 1985—adjusting the block grant for inflation in an indexed manner, beginning in fiscal year 1987. This legislation, signed by the President just a few months ago, would increase the block grant to $852.75 million for fiscal year 1987. That's a $27.75 million cost-of-living adjustment.

Mr. Chairman, I would like to give some brief background on the NAP prior to discussing the impact of the $27.75 million COLA in terms of benefits.

When the island was removed from the national food stamp program and granted a special nutrition assistance block grant program at a level 25 percent below the amount being received at that time, it resulted in the removal of 113,000 households from the program, and a reduction in the income eligibility level from $11,000 to $8,000. Currently, the income eligibility level on the mainland for a family of four is $15,848, while in Puerto Rico it remains at $8,000.

The maximum monthly benefit for a household of four in Puerto Rico is now $199 as opposed to $268 on the mainland. Food prices, I should emphasize, are approximately 32 percent higher in Puerto Rico than in the Washington, DC, area.

Over 62 percent of our population in the island lives below the Federal poverty level, versus slightly more than 10 percent of the population in the United States, according to the 1980 U.S. census. Since 1980, the unemployment level in Puerto Rico has climbed from 17 percent to a level of 20.3 percent in February 1986. To compare, the State with the highest level of unemployment for that month was Louisiana, which registered a 13.2 unemployment rate in February 1986.

### PUERTO RICO PARTICIPATION

Close to 50 percent of the population participates in the Nutritional Assistance Program. Despite the unfortunate economic circumstances which affect Puerto Rico, it does not participate in the major programs such as general revenue sharing and Supplemental Security Income, and only has a limited participation in programs such as AFDC and Medicaid.

Last December, the enactment into law of the continuing resolution, H.J. Res. 465, imposed another decrease, a 0.6 across-the-board reduction on all the Department of Agriculture programs, including the Nutritional Assistance Program. This reduced the block grant to $820.5 million, an additional loss of $4.95 million.

This became the spending base level adopted by the CBO, as well as the Senate Budget Committee in its concurrent resolution 120, passed by the Senate on May 2, 1986, which assigns $847.11 million to the Nutritional Assistance Program, instead of the $852.75 million authorized by the Food Security Act of 1985.

This would represent a loss of another $5.64 million in addition to the $4.95 million already taken from fiscal year 1986 funding.

The high food prices in Puerto Rico and their continued increase has led us to an erosion each year of the real value of the $825 million grant. Measured in 1983 dollars, the real value of the block grant in fiscal year 1987 will be $733.7 million, a $91.3 million decline. For fiscal years 1988 and 1989, the real value of the NAP block grant would be $707 million for 1988 and $678 million for 1989, respectively.

The intent of the Food Stamp Program has always been, to alleviate hunger of the poorest of the poor. The Puerto Ricans are the poorest of the poor. And, on behalf of the needy population of Puerto Rico, we request your support in granting the island for fiscal year 1987 the full amount that was authorized by this Congress in the Food Security Act of 1985 and signed by the President into law, which is the $852.7 million.

Thank you very much for your time.

Senator ABDNOR. Well, thank you. And I realize this is an area that has been treated differently than others.

I am just curious though, about the spread between food prices in this country and Puerto Rico. You say that the food is 32 percent higher. Is that about the average?

Mr. ORTIZ-DALIOT. Yes, sir; that's according to an economic study that we had done recently.

Senator ABDNOR. Thank you very much. Your entire statement will be made a part of the record. And I'm sure it will be examined closely.

Mr. ORTIZ-DALIOT. Thank you, Mr. Chairman.

[The statement of Mr. Ortiz-Daliot follows:]

## STATEMENT OF JOSÉ A. ORTIZ-DALIOT

Mr. Chairman, distinguished members of the Senate Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies.

I am José A. Ortiz-Daliot, Director of the Puerto Rico Federal Affairs Administration, otherwise known as Office of the Governor of Puerto Rico in Washington, D.C. I welcome this opportunity to present testimony on behalf of the low-income citizens of Puerto Rico with respect to the fiscal year 1987 funding appropriation for the Puerto Rico Nutrition Assistance Program (NAP) block grant.

Last year the Senate and House Agriculture Committees, recognizing the inequity of the $825 million ceiling on the NAP program over the last five years, approved legislation (P.L. 99-198 - The Food Security Act of 1985) adjusting the block grant for inflation, in an indexed manner, beginning in fiscal year 1987. This legislation, signed by the President just a few months ago, would increase the block grant to $852.75 for fiscal year 1987 - a $27.75 million cost of living adjustment (COLA). Mr. Chairman, I would like to give some brief background on the NAP prior to discussing the impact of the $27.75 million COLA in terms of benefits.

When the island was removed from the national food stamp program and granted a special nutrition assistance block grant at a level 25% below the amount being received at that time, it resulted in the removal of 113,000 households from the program and a reduction in the income eligibility level from $11,000 to $8,000. Currently, the income eligibility level on the mainland for a family of four is $15,848.

The Puerto Rico Department of Social Services estimates that currently 135,000 households with incomes of $8,000 or less are not participating in the NAP due to the five year funding freeze on the program. Of these 135,000 households, it is expected that approximately 13,800 households could be added to the program and would receive benefits averaging $163 per month if the $27.75 COLA were to be appropriated. The maximum monthly benefit for a household of four in Puerto Rico is now $199 as opposed to $268 on the mainland.

Food prices are approximately 32% higher in Puerto Rico than in the

Washington, D.C. area. Over 62% of the population of the island lives below the federal poverty level versus slightly more than 10% of the population in the United States according to the 1980 U.S. census report. Since 1980 the unemployment level in Puerto Rico has climbed from 17% to a level of 20.3% in February of 1986. The state with the highest level of unemployment for that month was Louisiana, which registered a 13.2% unemployment rate in February of 1986.

Close to 50% of the population participates in the NAP. Despite the unfortunate economic circumstances which affect Puerto Rico, it does not participate in major programs such as General Revenue Sharing and Supplemental Security Income (SSI), and only on a limited basis in programs such as AFDC ($72 million ceiling) and Medicaid ($63.4 million ceiling).

Last December the enactment into law of Continuing Resolution H.J. 465 (P.L. 99-190) imposed a .6% across-the-board cut on all Department of Agriculture programs including the NAP, reducing the block grant to $820.05- a loss of $4.95 million. This became the spending baseline adopted by the CBO, as well as by the Senate Budget Committee in its Concurrent Resolution 120, passed by the Senate on May 2, 1986, which assigns $847.11 million to the NAP, instead of the $852.75 million authorized by the Food Security Act of 1985. This would represent a loss of another $5.64 million in addition to the $4.95 million already taken from fiscal year 1986 funding.

In 1984 a study done for the American Federation of State, Country, and Municipal Employees reported that Puerto Rico ranked third in the nation in per capita losses in federal aid over the previous three years. We led the nation in losses in such areas as nutrition assistance, employment and training, and assistance to the educationally deprived. That Puerto Rico should be hit hard by federal expenditure cuts is the natural outcome of a national policy of retrenchment in social programs which aid the poor. In spite of tremendous economic advances made during the 1950s and 60s, Puerto Rico remains the poorest juristiction in the United States by a substantial margin. The 1980 U.S. Census reported that the median family income in Puerto Rico was $5,923, which is only 26 percent of median family income in the

United States. In 1983, the per capita income of Puerto Rico was $3,897, while Mississippi's was $8,098 for that year.

One of the consequences of this persistent poverty has been increased migration to the mainland. In the decade of the 1970's, the number of Puerto Ricans living in the mainland grew by some 600,000 to 2,014,000, or by 41%. In Puerto Rico the population grew by 474,000 to a total of 3,184,000, or by 17.5%.

When Puerto Rico experienced its worst recession since the Great Depression in the mid-1970's, the blow was cushioned to a certain degree by a rise in federal expenditures for social programs. In the 1980s, declines in the private sector have been accompanied by reductions in the public sector. These trends continue with the fiscal year 1987 Administration budget.

The high food prices in Puerto Rico and their continued increase has led to an erosion each year of the real value of the $825 million grant. Measured in 1983 dollars, the real value of the block grant in fiscal year 1987 would be $733.7 million, a $91.3 million decline. For fiscal years 1988 and 1989, the real value of the NAP block grant would be $707.5 and $678.3 million respectively.

We would also like to bring to the attention of the Subcommittee an area of concern. We have learned that the Administration wants the Subcommittee to believe that the NAP should not be adjusted for inflation because Puerto Rico can attain this goal by eliminating the so-called Special Projects.

Public Law 97-35 permits the Commonwealth of Puerto Rico to "employ a small proportion of the block grant funds to finance projects that the Government of the Commonwealth believes likely to improve or stimulate agriculture, food production, and food distribution, which will increase the self-sufficiency and nutritional standards of needy citizens residing in the Commonwealth." The special projects were put in operation in FY 82. The funding of these projects reached a level of approximately $25 million during the incumbency of the previous administration in Puerto Rico. In 1985, a new administration came into power and immediately realized the need to redirect a large amount of the funds allocated to special projects to the direct beneficiaries of the program.

As a result of our efforts, the special projects have been reduced to a minimum of two projects -- the Tick Eradication and the Crop Protection programs.

The Tick Eradication program was slated for termination by the Department of Social Services, but has continued in operation at the request of the U.S. Department of Agriculture which strongly recommended that it be funded for 1986 at a higher level than for the previous year.

The intent of the food stamp program has always been to alleviate hunger on the poorest of the poor. Puerto Ricans are the poorest of the poor. On behalf of the needy population of Puerto Rico, we request your support of the funding provision for fiscal year 1987 with respect to the NAP block grant that was authorized by Congress in the Food Security Act of 1985 and signed into law by the President.

## NATIONAL UTILITY CONTRACTORS ASSOCIATION

### STATEMENT OF GERARD KENNY, PRESIDENT

### ACCOMPANIED BY DAVE McDERMITT, DIRECTOR OF GOVERNMENT RELATIONS

Senator ABDNOR. Our next witness is Mr. Gerard Kenny, president of the National Utility Contractors Association, accompanied by Mr. Dave McDermitt, director of government relations.

Mr. Kenny, Mr. McDermitt, we welcome you to the committee.

Mr. KENNY. Thank you, Mr. Chairman. I am Jerry Kenny, and I'm the president of the National Utility Contractors Association. This is Dave McDermitt, director of government relations.

I will present the testimony for our group, and Dave is here to help me with any questions you may have when we are through with our presentation.

Mr. Chairman and members of the committee, as president of the National Utility Contractors Association I represent over 2,000 companies nationwide that are in the construction and supply side of the wastewater treatment project construction industry. Because many of the systems built by our members are financed through the Farmers Home Administration water and waste disposal grant and loan program, I will take this opportunity to give to you the construction industry's viewpoint on how we view the Farmers Home Administration grants for this coming year.

I begin by expressing the industry's staunch opposition to President Reagan's plan to terminate funding for this important project in fiscal year 1987.

Studies in recent years indicate that over $200 million are required for this Nation's water delivery and sewage treatment systems within the next 15 years to take us into the 21st century. Despite these acknowledged needs, the Reagan administration's fiscal year 1987 budget request for the major Federal programs shows a reduction of 57 percent in wastewater and water delivery programs over the 1980 budget levels.

Specifically, the reduction is from $6.63 billion in fiscal year 1980 to the proposed 1987 total of $2.85 billion. A breakdown of these figures is included in my written testimony submitted to you.

The FmHA's statistics also reveal that the total number of grants and loans to rural communities has dropped dramatically, from 1,825 to just 783 in fiscal year 1985, more than a 50-percent decrease. Unfortunately, State and local governments have been unable to pick up the slack in funding of these programs.

It is also important to note that the pending tax reform proposals to impose additional restrictions on municipal development bonds would exasperate this financing problem facing rural communities by limiting their local funding resources. Even the new program coming out of the Senate just earlier this week inhibits that interest deduction.

### WASTEWATER TREATMENT

In addition to financing the water supply projects, the Farmers Home Administration program has proven to be a particularly important source of financing for wastewater treatment works and construction needs mandated by the Federal Clean Water Act. The Federal Government has given us until July 1, 1988, in the municipal communities to comply with their program and their laws. But fewer EPA construction grants are going to rural communities.

At the same time, however, EPA is stepping up the enforcement policy against all communities in sticking with that July 1, 1988, date. In essence, the agency is telling us and telling the municipalities: You must build the facilities required to meet the Federal standards. How you pay for them is your problem.

The Farmers Home program is often the only safety net. We are able to use and catch and pick up some of the slack and provide funding available to these rural communities that no other construction financing does.

Before summarizing, I would like to point out one particular problem that arose in 1985 as a result of new regulations governing Farmers Home Administration grants. Because of a ruling by the Comptroller General of the United States, communities are now prohibited from using FmHA grants to help satisfy the local share requirements of another Federal grant-in-aid program. Many communities, especially in the farm and rural communities, have used these grants successfully by combining EPA and FmHA funds over the years to result in the construction of a number of rural sewage treatment systems that otherwise would not have been built.

This concept was proven to be even more important since October 1984 when the local share of the EPA funds was reduced from—or increased from 25 percent to 45 percent of the total construction costs.

While the number of communities affected is relatively small, it is the poorest communities that have suffered the most as a result of this regulation. We strongly urge you and the committee to include language in your fiscal year 1987 agriculture appropriations bill specifically including and permitting the use of FmHA grants for this function.

At NUCA we are working right now very closely for winning congressional approval for authorizing the Farmers Home to use its grants for this purpose. However, we have not achieved this at this point.

In summary, I implore the committee to appropriate $455 million in fiscal year 1987 appropriations for the FmHA water and waste disposal program, a level equal to that in recent years. Like any responsible business group, we understand the need for a balanced budget, but when you take a look at the cuts that would result from the administration's budget requests—a 57-percent reduction in Federal funding from 1980 levels—we feel strongly in this area that the Federal budget has already been pared to the bone.

Funding for this program is an investment in our future. It's an investment in the economic prosperity of the United States. As we move into the 21st century, we need a strong infrastructure, a strong water and a strong wastewater disposal program, not only in our major metropolitan areas but also in the rural areas where the FmHA grants help the most.

The one thing that should be pointed out is that investment in the future will help the underdeveloped regions of this country. This program is important, it is efficient, and above all, it is working.

I thank you, sir, for your attention and yours and the committee's time to hear us today.

Senator ABDNOR. We thank you, Mr. Kenny, for your fine statement. We certainly know where you are coming from on this. Our challenge is how to allocate money for the Agriculture Subcommittee. I'm sure it's not going to be an easy thing.

I appreciate your statement, and it will certainly be considered. Hopefully, we can all come up with something that is workable and suitable. Of course, we do live within a confinement.

Mr. KENNY. We would sincerely appreciate your support, Senator. We thank you again for your time.

Senator ABDNOR. I appreciate it. Thank you both.

[The statement of Mr. Kenny follows:]

## STATEMENT OF GERARD KENNY

Mr. Chairman and members of the Committee, the National Utility Contractors Association (NUCA) is comprised of 2,000 contractors, suppliers and manufacturers nationwide that specialize in water delivery and wastewater treatment construction projects. Many of the water and sewer systems built by our members are financed through the Farmers Home Administration (FmHA) Water and Waste Disposal grant and loan program.

As a result of our work in constructing the facilities funded by this important program, I will take this opportunity to offer the construction industry's views on the program and its effectiveness.

I begin by expressing the industry's staunch opposition to President Reagan's plan to terminate funding for the Water and Waste Disposal program in fiscal 1987.

The nation has been alerted over recent years to the impending infrastructure crisis facing all areas of the country. Studies indicate spending for our system of public works must be dramatically increased at all levels of government just to keep pace with current needs. Water delivery and wastewater treatment systems account for a large share of these projected construction needs. A highly respected 1984 study by the Congressional Joint Economic Committee estimates more than $200 billion alone must be spent on these two areas of construction by the year 2000. Similar studies by the Environmental Protection Agency and other groups support these figures.

### Sharply Reduced Federal Funding

Despite these acknowledged needs, however, a survey by our association reveals that the Reagan administration's fiscal 1987 budget request for the major federal programs that finance the construction of water delivery and sewage treatment systems represents a staggering 57% reduction from Congressional appropriations for these programs in fiscal 1980. Specifically, the reduction is from $6.63 billion in 1980 to the proposed 1987 total of $2.85 billion included in the President's budget request for these programs. A breakdown of these figures follows:

FEDERAL WATER/WASTEWATER CONSTRUCTION SPENDING

| Program | Fiscal 1980 Appropriations | Fiscal 1987 Request | Decrease |
|---|---|---|---|
| Farmers Home Administration (FmHA) Water/Waste Disposal Program (total grants & loans) | $990 million | -0- | $990 million (-100%) |
| Economic Development Administration (EDA) | $582 million | -0- | $582 million (-100%) |
| Environmental Protection Agency (EPA) Construction Grants | $3.4 billion | $1.8 billion | $1.6 billion (-47%) |
| Corps of Engineers (civil works program - construction funding only) | $1.66 billion | $1.05 billion | $61 million (-37%) |
| TOTAL = | $6.632 billion | $2.85 billion | $3.78 billion (-57%) |

FmHA statistics also reveal that the total number of grants and loans to rural communities has dropped from 1,825 in 1980 to just 783 in fiscal 1985 -- more than a 50% decrease.

Have state and local governments picked up the slack? Unfortunately not, as records indicate public construction as a percent of total construction volume is lower now than at anytime since 1947. Sharp drops in the public share of new construction in recent years have lowered the public share to 17.9% in 1984 -- far below the 30% share as recently as 1975. In fact, the total annual expenditure by the federal, state and local governments for public capital investment projects has declined by more than 50% in just the last 15 years.

In addition to cutting back federal appropriations for these programs, impending tax proposals would exacerbate the problem facing rural communities by limiting their ability to finance construction work through their local resources. Restrictions on municipal development bonds and other proposals expected to be an integral part of the final tax reform package would further hinder the opportunity for local communities to finance construction.

Perhaps the truest indicator of the continued need for this FmHA program is the number of preapplication and unobligated applications pending as of the first week in April. A total of 1,645 applications for grants and/or loans totaling $953 million is now awaiting action (and funding) at Farmers Home headquarters.

The number of pending applications is nearly identical to those on hand one year ago, while the total dollar amount has risen $32 million during that time. These figures indicate that despite the $455 million appropriated by Congress for fiscal 1986, rural communities still have an acute and urgent need for water and sewer system construction financing.

The benefits derived from the Water and Waste Disposal program can generally be classified under the headings of economic development and public health.

## Economic Growth and Public Health

Funding for this program must be viewed in budgetary terms not as a liability but as a long-term asset because it represents an investment in the future economic growth of the nation's underdeveloped areas. A sound network of water delivery and sewage treatment facilities is essential to the economic growth of these rural areas. Studies indicate businesses and industries place the condition of an area's sewer and water system near the top of their list of criteria in determining whether to build, expand or relocate.

Perhaps the most alarming statistic estimates that 46% -- nearly one half -- of the nation's communities are unable to add additional businesses and residences onto their sewage treatment systems because they are already operating at full capacity. It has been the experience of many of our member companies located in rural areas that vitally needed businesses that could provide an infusion of capital and employment opportunities into the local economy locate elsewhere due, at least in part, to inadequate water and sewer facilities.

Adequate funding for this FmHA program is also necessary to meet the needs of the public health. Due to inadequate funding to finance pipeline and treatment construction, many rural communities rely on septic tanks for sewage disposal and underground wells for water. Currently, approximately 60 million Americans are without sewer service. The alternative is largely the use of septic tanks. When operated and maintained properly by owners living on suitable soil, septic tanks can provide a cheap and efficient method of waste disposal. However, studies indicate that at any one time, 20 to 60 percent of the septic tanks in the United States are malfunctioning.

More importantly, malfunctioning tanks are a major source of both groundwater and surface water pollution. The National League of Cities, in previous testimony before Congress, noted that the use of septic tanks can lead to groundwater pollution, local and regional public health problems and contamination of water supplies. One alternative is a soil collector or absorption system. However, for 68% of municipalities with populations of under 10,000, the soil conditions are unsuitable for a soil absorption system.

## Water Pollution Control

Over the years, the FmHA Water and Waste Disposal program has also proven to be an important source of financing wastewater treatment construction needs mandated by the federal Clean Water Act. Farmers Home officials report a significant percentage of the programs's funding is used to assist poor communities in financing the 45% local share required to receive an EPA grant under the EPA construction grants program. Any reduction in FmHA funding would surely result in a slowdown in our nation's water pollution control battle.

It is also important to know that an increasing percentage of EPA sewer construction funding is now awarded to largely urban communities for treatment plant construction. Only a small percentage is now being used to construct sewer pipeline systems, such as collector pipelines. This policy penalizes small rural communities because pipeline costs represent 80% of the total project cost in small municipalities. In high density urban areas, however, pipeline construction accounts for only 15 to 20% of treatment systems costs.

As a result, fewer EPA construction grants are going to rural communities. At the same time, however, EPA is stepping up its enforcement policy against all communities and is requiring them -- often by using court orders and other administrative powers -- to build the sewage treatment systems necessary to meet federal water quality standards. In essence, the agency is saying to communities, "You must construct the facilities required to meet water quality standards in your area. How you pay for it is your problem." The FmHA program is often the safety net for these communities with no other available source of construction financing.

## FmHA - EPA Financed Projects

Before summarizing, I want to point out a problem within the program that has arisen as a result of regulations promulgated in 1985 governing FmHA water and waste disposal grants. Because of a ruling by the Comptroller General of the United States, communities are now prohibited from using a FmHA grant to satisfy the local share requirements of another federal grant-in-aid program. NUCA strongly urges the committee to adopt language in its fiscal 1986 appropriations bill permitting the use of FmHA water and waste disposal grants for this purpose.

Since the inception of the EPA Construction Grants program over a decade ago, many rural communities have used a Farmers Home Administration grant to finance their EPA-required "local share." Combining these two sources of federal funds has resulted in the construction of rural sewage treatment systems, many of which would not have been built without the assistance of a FmHA grant. Many communities have traditionally made use of a FmHA grant award for this purpose during the past decade.

This restrictive regulation promulgated by FmHA in accordance with the Comptroller General's edict is particularly harmful for some communities because of the increase in the local share requirement for wastewater treatment projects financed by EPA. As part of the 1981 Clean Water Act Amendments, the 25% local share was increased to 45% effective October 1, 1984. NUCA members report that some communities, particularly those in rural areas, have designed projects that are ready to go to construction. The projects have been delayed or postponed, however, because they are unable to meet the 45% local share requirement necessary to receive a 55% EPA grant.

While only a relatively small number of communities have been affected in proportion to the overall number of FmHA grant and loan recipients, it is the poorest communities -- those unable to secure other sources of construction financing -- that have suffered the most as a result of this regulation.

NUCA was instrumental in winning final approval for language included in the Food Security Act of 1985 (the farm bill) authorizing the use of FmHA grants to help communities satisfy the local share requirements of another Federal grant-in-aid program if authorization is also granted by EPA authorizing legislation. Language is also included in H.R. 8 (the Clean Water Act Amendments), which has been approved by the House of Representatives, authorizing the use of FmHA grants for this purpose. Until this language is approved by a House - Senate conference committee and the President, however, communities are now prohibited from using a Farmers Home Administration grant to help meet their EPA local share.

A traditional source of financing has been made unavailable to poor rural communities in recent months because of this regulation. Therefore, we strongly urge the committee to include language in its fiscal 1987 agriculture appropriations bill permitting the use of FmHA grants for this important purpose.

## Summary

Mr. Chairman and members of the committee, I conclude by imploring you to appropriate an adequate amount of funding in fiscal 1987 for the FmHA Water and Waste Disposal program. A funding level of $455 million, equal to that of recent years, is certainly reasonable and responsible in light of the current need for this construction financing and the benefits derived from it. Under the outstanding administration of the program by John Bowles, Acting Assistant Administrator for Community and Business Programs, and James Schwartz, Director of the Water and Waste Disposal Division, the program has efficiently and expeditiously made the grants and loans necessary to build these vitally-needed projects. The loan delinquency rate of less than 2% is just one indication of the effective administration of this program.

As any responsible business group, the National Utility Contractors Association (NUCA) supports a balanced federal budget. But given the figures cited earlier in my testimony, which indicate a 57% reduction in federal funding for these water and sewer construction programs, we feel strongly that the construction area of the federal budget has already been pared to the bone. Further reducing or eliminating funding will not reduce the need for this financing, it will only postpone construction -- and postponing construction leads to even greater costs and higher prices in the future.

This program is important, it is efficient and, above all, it is working. I strongly urge you to continue your past support for adequate funding in fiscal 1987 and beyond. Thank you for granting me the opportunity to appear before you here today, and I will be happy to answer any questions you may have at this time.

## NATIONAL ASSOCIATION OF HOME BUILDERS

### STATEMENT OF DAVID C. SMITH, PRESIDENT

**ACCOMPANIED BY:**

**RICHARD BAUMGARDER, CHAIRMAN, RURAL HOUSING, NATIONAL COMMITTEE**

**BOB HANEY, PAST RURAL HOUSING NATIONAL COMMITTEE CHAIRMAN**

Senator ABDNOR. With us today is Mr. David Smith, president of the National Association of Homebuilders. You go right ahead, Mr. Smith.

Would you mind introducing your colleagues that you have with you?

Mr. SMITH. Mr. Chairman, I have with me Dick Baumgarder from the State of Pennsylvania, who is the chairman of our Rural Housing National Committee; and, also another rural housing builder from Oklahoma, Bob Haney.

My name is David Smith, and I am a homebuilder and president of the National Association of Home Builders. It's a privilege to appear before you, Mr. Chairman, and to acknowledge your leadership in providing an effective housing delivery system to the rural people of this country.

First, I would like to urge you to support the disapproval of the President's fiscal year 1986 deferral of $700 million in rural housing funding as contained in the urgent supplemental appropriations bill (H.R. 4515).

Second, we strongly urge this subcommittee to adequately fund and support the Farmers Home Administration programs which have helped 2 million families, the elderly and the handicapped afford housing in rural areas where there often is no access to credit.

The President's budget not only calls for the $700 million deferral of rural housing program funds in fiscal year 1986, but seeks to eliminate funding for these programs in fiscal year 1987. In its place, the Department of Housing and Urban Development [HUD] would provide 50,000 housing vouchers to be shared by both urban and rural households.

Housing vouchers will not assist in adding to the housing stock in rural America. Rural housing programs have already been cut approximately 40 percent since 1985. And with the $700 million deferral for fiscal year 1986, it could reach a 60-percent cut in 1 year.

While deficit reduction remains our most important national priority, housing should not take a disproportionate share, as occurs in the administration's budget. NAHB believes that any budget package should be fair and across the board, and we believe that the budget approved by the Senate last week meets those goals.

We applaud you for the responsible and the significant action.

### FUNDING LEVELS FOR SECTIONS 502 AND 515 HOUSING

Mr. Chairman, a problem has also arisen concerning the Budget Reconciliation Act signed by the President last month. This law gives full fiscal year 1985 funding levels to the section 515 multifamily program of $900 million while cutting the section 502 single-family program by 50 percent to $1.2 billion.

The continuing resolution passed last December funds the section 515 and the section 502 programs at $700 million and $1.4 billion, respectively. A question has arisen as to which law has priority and how the deferral would relate to the new law.

We hope that this matter can be resolved with the highest possible funding, so that rural housing programs are not further disrupted in the field. We also hope that sufficient rental assistance will be provided for in the section 515 program in the fiscal year 1987, not only to extend existing contracts but to provide funding for new construction units.

Mr. Chairman, we should not lose sight of the fact that rural housing programs serve needy families and elderly who are unable to obtain credit from private lenders. Under the section 515 multifamily housing program, almost 70 percent of the tenants assisted have incomes below $6,000 with assistance reduced as income increases.

The section 502 single-family program requires that 40 percent of all funds must go to very low income borrowers with income at or below 50 percent of the area median, with the other 60 percent going to those at 80 percent of the median, or less.

The present very low income system, however, has the effect of disqualifying a number of needy borrowers. We hope that Congress will make needed adjustments so that the very low income families won't go unassisted, and the funds won't go unspent.

The section 502 program also calls for a recapture of funds by the Federal Government upon the sale of the property, and assistance under the program is reduced as the individual's ability to pay increases. Economic growth is also generated by the Farmers Home rural housing programs through jobs and taxes. The 55,000 units built in fiscal year 1985 produced 70,000 jobs and $603 million in Federal, State and local revenue.

Successful cost containment measures are also essential to show that affordable Farmers Home housing can be built cost effectively. The

NAHB is working with the Farmers Home Administration in developing effective regulations consistent with the congressional and the General Accounting Office concerns.

We feel, however, that existing homes should meet the same standards as new construction or not be allowed in the program. In conclusion, Mr. Chairman, we urge Congress and the subcommittee to adequately support funding for the rural housing programs and to maintain the current rural housing credit and delivery system.

I want to thank you for the opportunity to present our views, and we will be glad to answer any questions that you may have.

### ALLOCATION OF FUNDS

Senator ABDNOR. Thank you, Mr. Smith. I was wondering, you mentioned the Budget Act we passed on the floor of the Senate here last Thursday. Does that provide an improvement for you?

I just wondered how you feel about it? You know our problem; we are going to wind up with only so many bucks, and we've got to figure out how to allocate them.

It's going to be quite a challenge for this committee, and I'm sure the committee will appreciate your testimony. We will put the entire statement in the record. I know we rushed you through it, but we are falling way behind time.

We thank you for your appearance here today.

Mr. SMITH. Well, we appreciate the opportunity, and certainly I know that all of those out in rural America that do not have the availability of funds from other sources appreciate what's happening in rural housing.

Thank you.

Senator ABDNOR. Thank you very much.

[The statement of Mr. Smith follows:]

## STATEMENT OF DAVID C. SMITH

My name is David C. Smith and I am a homebuilder from McDowell, Virginia. I am testifying on behalf of the more than 138,000 members of the National Association of Home Builders (NAHB). NAHB is a trade association of the nation's homebuilding industry, of which I am President. I am pleased to be here to testify on the FY'87 appropriation for the Farmers Home Administration (FmHA) rural housing programs. It is a privilege to appear before you, Mr. Chairman, and to acknowledge your leadership in providing an effective housing delivery system to rural people.

I would also like to urge you to support the disapproval of the President's FY'86 deferral of $700 million in rural housing funding as contained in the Urgent Supplemental Appropriations bill, H.R. 4515. Because of this deferral, some rural housing programs are no longer being financed in many states. This has denied low income people in rural areas needed housing assistance.

### FY'87 Funding

Mr. Chairman, we strongly urge this Subcommittee to adequately fund and support the Farmers Home Administration programs which have helped two million families, the elderly and the handicapped afford housing in rural areas. The conditions which gave rise to authorization for FmHA to make housing loans in 1949 still exist today, but the commitment to providing housing in rural areas is in serious doubt.

The President's budget not only calls for the $700 million deferral of rural housing program funds in FY'86 but seeks to again eliminate funding for these programs in FY'87. Rural residents are to obtain housing assistance from the Department of Housing and Urban Development (HUD) where only 50,000 vouchers are proposed to be shared by both urban and rural households.

While deficit reduction remains our most important national priority, NAHB believes that any budget package should be fair and across-the-board. It must include cuts in both defense and domestic spending and if necessary broad-based revenue raising measures. We will support a fair share of cuts in rural housing programs as long as they do not exceed the Gramm-Rudman-Hollings deficit reduction sequestration formula.

## Effect of Cuts on Rural Housing Programs

Rural housing programs have already been cut approximately 40% since 1985. With the additional $700 million deferral the FY'86 cut increases to almost 60% -- all in one year.

As you are aware, Mr. Chairman, the President recently signed the Consolidated Omnibus Budget Reconciliation Act (P.L. 99-272). This legislation provides $2.146 billion for rural housing programs compared with $2.128 billion contained in the Continuing Resolution Appropriation for rural housing programs last December.

The Budget Reconciliation Act also gives full FY'85 funding levels to the Section 515 multi-family program of $900 million while cutting the Section 502 single-family program by 50% to $1.2 billion. The Continuing Resolution funds Section 515 and Section 502 at $700 million and $1.4 billion respectively. A question has arisen as to which law has priority and how the deferral would relate to the new law. We hope this matter is expeditiously resolved so that rural housing programs are not further disrupted in the field.

The following chart shows these figures:

Rural Housing Funding

|  | RHIF | Section 502 SF Program | Section 515 MF Program |
|---|---|---|---|
| FY'85 Appropriation | $3.238 billion | $2.3 billion | $900 million |
| FY'86 Appropriation | $2.128 billion | $1.4 billion | $700 million |
| FY'86 Budget Reconciliation | $2.146 billion | $1.2 billion | $900 million |
| FY'87 Administration Budget | --0-- | --0-- | --0-- |

We also hope that sufficient rental assistance funds will be provided for the Section 515 program in FY'87 not only to extend existing contracts but to provide funding for new construction units. Without this assistance, many needy low income families and the elderly will not be able to obtain housing.

Rural Housing Has Already Taken Its Share of Cuts: Mr. Chairman, rural housing programs have already taken sizeable cuts. The total number of units assisted by FmHA has declined 50% from FY'80 to FY'86. If the loss of units from the $700 million deferral is included, the reduction amounts to almost 65%. The following chart shows the unit reductions:

Total Incremental Units Assisted
(Fiscal Years)

| 1980 | 1985 | 1986 (estimate | 1986 (estimate with deferral) | FY'87 (Admin. Budget) |
|---|---|---|---|---|
| 150,169 | 87,647 | 72,381 | 53,983 | - 0 - |

Source: FmHA; compiled by NAHB.

## Need for Rural Housing

Rural housing programs serve only truly needy families and the elderly who are unable to obtain credit from private lenders. Under the Section 515 program, almost 70 percent of the tenants assisted have incomes below $6,000. Under the Section 502 program, the law now states that 40 percent of all Section 502 funds must go to very-low income borrowers with incomes at or below 50 percent of area median. If there is a safety net, surely it would be designed to meet the shelter needs of these low income people. We would ask, however, that under the Section 502 very-low income program that legislation be considered to allow the use of non-metropolitan income figures to be used in conjunction with the current system which depends on HUD's area median income figures. The present system has the effect of disqualifying a number of worthy borrowers and allowing needed rural housing funds to go unspent.

Rural housing under the Section 502 program is a limited assistance program: as the borrowers' income goes up, the assistance is reduced. When the home is sold, the assistance is recaptured. Assistance under the Section 515 program is also reduced as the ability to pay increases.

Economic growth is also generated by FmHA rural housing programs through jobs and taxes. The 55,000 units built in FY'85 produced 70,000 jobs and $603 million in federal, state and local revenue.

Demand for rural housing programs continues. According to the 1980 Census, there are over 2 million substandard units of housing in rural areas with half living on incomes below the poverty line. According to a Library of Congress report, "Housing in Rural Areas", substandard housing is two to five times greater in rural areas than in urban areas.

Additionally, according to a recent Government Accounting Office (GAO) report on the Section 502 program, "... a substantial need remains for housing among lower income rural households." There is no less demand for the Section 515 multifamily housing program.

## HUD Transfer

There is no question that the transfer of rural housing programs to HUD would not be an effective way of servicing the housing needs of rural people. It is not really a transfer of programs to HUD; the existing Farmers Home programs are to be terminated. Rural and urban areas would then share whatever money is appropriated for a voucher system. Both rural and urban America would lose under this system. There is not adequate housing stock in rural areas for a voucher system to work and HUD has no experience in rural areas and could not duplicate FmHA's existing delivery system.

## Lack of Credit in Rural Areas

It has been suggested that rural housing credit needs be financed by the private sector. Substituting the FmHA direct lending system with guarantees to private banks to make loans or establishing a block grant are not workable.

I would like to take this opportunity, Mr. Chairman, to thank you for your work opposing the block grant approach to meeting the housing needs of rural Americans. Your efforts both this year and in the past are very much appreciated.

As you are aware, block grants depend on state governments or private credit to provide mortgage assistance. Home mortgages can be a risky investment for small rural lenders who are already facing delinquencies and foreclosures due to the federal funding cutbacks to states and weakening rural economies.

Private substitution for credit is also flawed for a number of reasons. First, many rural areas have no banks. Over 500 counties have no federal savings and loan institution. Second, rural areas have only 17% of the nation's savings and are not likely to lend to low income people who need substantial credit assistance. Third, a loan guaranty program has already been tried in rural areas and was not successful.

## Program Improvements

Mr. Chairman, we recognize that there is a need for program improvements. I would like to take this opportunity to comment on both the proposed rule for FmHA mobile/manufactured homes and cost containment measures which are presently being considered by the Farmers Home Administration.

Energy Standards for FmHA Mobile/Manufactured Homes: We have serious reservations concerning the lenient thermal performance standards allowed under the proposed FmHA mobile/manufactured housing regulations which will increase operating costs for borrowers.

Low income families and the elderly do not have sufficient incomes to meet the high fuel costs predominant in many parts of of the country. In addition, the statutory requirement in the 1983 Housing Act which calls for the establishment of standards to reduce operating costs for borrowers by maximizing energy savings have been ignored in the regulations.

We hope that you will take the necessary action to assure that FmHA thermal performance standards will be adopted rather than the proposed Title II thermal standards at HUD. Affordability will increase and delinquencies will be reduced by this change in the regulations.

Cost Containment: NAHB has been pleased to assist the Farmers Home Administration in developing effective cost containment regulations for Section 502 and Section 515 rural housing programs consistent with Congressional and Government Accounting Office (GAO) concerns.

We recommend that the cost containment provisions applied to new construction also be implemented for existing housing programs. If existing homes do not meet the new cost containment guidelines, they should not be allowed financing under FmHA programs.

During the transition to the new guidelines, however, exceptions must be made for new homes in inventory and loans which have already received conditional commitments. Loan assumptions should also be exempt to prevent market disruptions in the program.

Successful cost containment measures are essential to show that affordable Farmers Home housing can be built cost effectively in rural America.

## Conclusion

Rural housing programs have had a record of great achievement in serving the shelter needs of rural Americans. They have provided an effective mortgage delivery system for new residential construction critical to providing needed accessibility to credit. They are providing the housing safety net for lower income Americans.

We urge Congress and this Subcommittee to adequately support funding for rural housing programs and to maintain the current FmHA rural housing credit and delivery system.

Thank you for this opportunity to present our views. I will be happy to respond to any questions.

## COUNCIL FOR RURAL HOUSING AND DEVELOPMENT

### STATEMENT OF CHARLES L. EDSON, COUNSEL

Senator ABDNOR. Our next witness is Mr. Charles Edson. We are glad to have you at the table, and we welcome you to the committee, Mr. Edson.

Mr. Edson is legal counsel for the Rural Housing and Development Council.

Mr. EDSON. Thank you very much, Mr. Chairman. For the record, my name is Charles Edson of the Washington, DC, law firm of Lane and Edson, P.C. I am counsel to the Council for Rural Housing and Development on whose behalf I testify today.

We have prepared a statement which I would ask be submitted into the record in its entirety.

Senator ABDNOR. It will be. Without objection, the entire statement will be made a part of the record.

Mr. EDSON. I will speak very briefly on four points, because our statement covers such things as the need for the program and its merits in the past years, which I'm sure you and the committee are most familiar with, and we don't want to take your time.

Senator ABDNOR. You are very thoughtful.

Mr. EDSON. Just four points. First, the Budget Committee, as you know, retained 1987 funding for the rural housing programs, section 515 in our case, at the same level as fiscal year 1986. We hope that that will be the same mark that you and the Appropriations Committee will give in your considerations.

As the prior speakers have said, we have taken our cuts. We have given not only at the office but at home as well, and enough is enough. We hope to retain present levels.

Second, as you are also aware, on March 17, the administration sought to defer a significant amount of funds for the rural housing programs—about $230 million for section 515. There is a resolution pending in the House to disapprove the deferral. It will come over to the Senate presumably after that.

We hope that you will join your colleagues in the House in disapproving that deferral of funds which you appropriated only last——

Senator ABDNOR. Let me just interrupt you long enough to say that I hope they soon send it over.

Mr. EDSON. Yes; they are a little bit involved with the Contras and a few other things.

The next point, of which you are aware and which I have already discussed with your staff director, and so I know you are aware, is that the deferral in this case is really a rescission, because they don't plan to use the funds next year. But, like Clementine, they will be lost and gone forever at the end of this fiscal year.

And that, by any definition, is a rescission, not a deferral.

Chairman Gonzales of the Housing Committee in the House and Representative Lundine, who is very concerned with these issues, have written the GAO on this matter asking the Comptroller General to rule this properly as a rescission. We hope that this committee would use its good offices in seeking such a ruling.

In that case, he would not even have to bother passing the antideferral resolution.

### TAX BILL PROVISIONS

The fourth and final point is not quite directly in the jurisdiction of this committee, but it's so relevant that I feel compelled to call it to your attention, and that is two provisions in the tax bill reported 2 days ago by the Finance Committee that could make much of what you do either moot or very expensive.

The first is the denial of losses from limited partnerships that exist now. It's not a matter of future partnerships, which at least you would know the law, but people who bought into section 515 projects frankly for the tax shelter that Congress, under present law, intended that they have. The only incentive really for a 515 is a tax incentive, because your return is limited to 8 percent which you can get on a savings account, and the appreciation factor generally is not there in low-income housing.

If you take away the tax incentive, you will take away the incentive for ownerships, and you will find starting next year that investors who make their payments over a 5-year pay-in period will default on those payments to the owner of the project, because the investor would not be getting any return anymore. And that well might cause the owners of the projects to default on their loans to Farmers Home. There will just be very uneconomical projects.

So you may be facing a lot of returned inventory which would be a costly matter to take care of.

The second problem in the tax bill relevant here is that the committee does have some tax incentives to encourage new section 515 housing, new low-income housing. There are tax credits instead of the present depreciation. It's a new concept; it's a good concept of a tax credit for low-income housing, sort of like the rehabilitation credit.

The only problem is that the committee would not allow section 515 projects, or any federally assisted low-income project, to be eligible for the credit. It's an incredible catch 22. They fashioned a credit that no project could use.

A simple amendment to allow section 515 and other federally assisted projects to be eligible for the credit would cure this.

I think both of these matters—the doing away with losses from existing projects and making 515 and other federally assisted projects eligible for the new credit—will be offered on the floor in floor amendments. I know there is a concern by several Senators on this point. We hope that when you sit sort of as the Finance Committee of 100 next month that you will favorably consider these amendments that are very relevant to what you are doing here today in Appropriations.

I thank you very much for hearing us today.

Senator ABDNOR. Thank you very, very kindly for your fine testimony, Mr. Edson. I know you are an expert in this area.

I must confess that the tax bill is quite new and foreign to me yet. I've got the general gist of it, but I'm sure we are going to see lots of amendments when it comes to the floor.

Mr. EDSON. Thank you.

Senator ABDNOR. We thank you for coming today and for your testimony which will be very helpful to the committee.

Mr. EDSON. Thank you again.

[The statement of Mr. Edson follows:]

## STATEMENT OF CHARLES L. EDSON

Mr. Chairman and members of the Subcommittee, my name is Charles L. Edson of Lane and Edson, P. C. I appear before you today in my capacity as Legal Counsel to the Council for Rural Housing and Development. I appreciate the opportunity to address you on the most important topic of housing for rural America.

The Council for Rural Housing and Development is an association of over 160 members, including eleven state associations, actively involved in the Section 515 rural rental housing program. Since its formation in 1980, the Council has been active in the legislative process and has worked closely with the Farmers Home Administration in the regulatory area to help protect and improve the Section 515 program. I think FmHA would agree that the close working relationship we have developed is one of mutual benefit.

### Rural Housing Need

Last year CRHD appeared before you and reported on the dire housing shortage and poverty of rural America. This year I regretfully must report again on the continuing great need for housing in rural America. Even more regretfully, I must do this in the face of continuing threats to our budget from the Administration which for the second year in a row proposes to eliminate the Farmers Home Administration's rural housing programs.

The Section 515 program performs a vital function today by filling a desperate need for decent, safe and affordable housing. In the FmHA service area there are over two million occupied housing units that are "substandard", meaning they lack adequate plumbing and/or are overcrowded. 850,000 households with incomes below the poverty line live in such housing. According to FmHA, in February 1986, the average income for a resident in a Section 515 project was $8,050. The average income for the very low income tenants was $5,969.

Although housing needs are the greatest in rural America, the supply of credit to meet those needs is simply not there. Over 550 rural counties do not have federally chartered savings and loans. Rural banks' per capita assets average only $3,400, less than half of the $7,000 per capita average in urban areas. Section 515 loans are made only after it has been proven that conventional financing is not available.

### Section 515 Activity

It is this mismatch of high need and low resources that impelled Congress to create the Section 515 program. Since its inception in 1963, the program has provided over 360,000 units of rental housing, serving over 790,000 elderly and low income citizens. The program has been tremendously cost efficient and has an excellent track record. In 1985, the average cost per unit was less than $31,500, down from last year and well under the average cost for new rental units. The Section 515 program is not a grant program; every loan is secured by a mortgage on the assisted housing and will be repaid. Defaults are less than 1%, a record unmatched by any other federal housing program.

The Section 515 program often presents the only hope for many rural Americans in dire need of housing. However, the program does more than just provide shelter. Section 515 results in good community development. The concentration of people in rental units can mean less Federal, state and local tax dollars spent on street and road construction and maintenance, sewer and water construction as well as public school transportation, and less farm land being diverted to subdivision construction. Often, the location of a Section 515 project in a community has helped attract new industry by providing housing for potential employees. Money spent on Section 515 creates a community asset that lasts for many years as opposed to one shot assistance under most social service programs.

In FY85 FmHA assisted in the production of more than 90,000 units of rural housing which was responsible for the creation of more than 100,000 jobs. It is estimated that every FmHA financed unit creates 1.3 person-years of employment, meaning almost 470,000 person years of employment have resulted from the program. This further translates to billions of dollars in wages and tax revenues for local, state and Federal governments.

## The Future of Rural Housing

In 1985 the Section 515 program was reduced from its previous years appropriation of $940 million and funded at only $900 million. In FY86, the program was cut to $700 million. We believe we have contributed to reducing the federal deficit and further reductions in funding would be grossly unfair.

The Adminstration has requested a deferral of $700 million in FY86 rural housing funds, $233 million of which would come from the Section 515 program. Mr. Chairman, we urge you to do everything in your power to ensure that legislation to disapprove this deferral moves swiftly and as soon as possible through Congress. Right now, FmHA has hundreds of Section 515 loan applications stalled because of this deferral request and several states are not able to obligate loan funds at all. Since the authority for the program expires on September 30 and the Administration has requested no funding for the program in FY87, we believe this action in fact consititutes a rescission rather than a deferral.

In addition, as you know, the Reagan Administration has once again proposed to eliminate all rural housing programs in FY87, and place responsibility for rural housing with the Department of Housing and Urban Development. CRHD opposes the Administration's proposals for several reasons.

1. Eliminating the direct federal lending provided by the Farmers Home Administration assures a dramatic reduction in housing production and job creation in rural areas. An estimated 230,000 units of housing need to be replaced each year in rural areas. The rural housing building industry relies heavily upon FmHA financing, and the elimination of this financing could decimate the already low housing stock. The lack of other available sources of credit means a serious downturn in construction trades in rural areas.

2. HUD is simply not organized to provide the kind of loan servicing of which FmHA is capable. Loan servicing would be transferred from the local county FmHA office to a HUD area office often located in a big city far away. A major reason for the great success of the Section 515 program and particularly its low default rate, is the close personal attention each project is given by local FmHA officials from the time a loan application is submitted to the time at which the project's doors are formally opened to tenants and then following the management of the project throughout its life. It is highly unlikely that HUD will be able to provide the same kind of committed assistance which rural America has enjoyed from FmHA.

3. The Administration does not propose to increase funding for new construction of low income housing but would provide 50,000 housing vouchers, 50% of which would go to rural areas and 50% to urban areas. The Section 515 program alone provided over 28,000 units of rural housing in FY85; the 25,000 units proposed by the Administration for all rural housing in FY86 is woefully insufficient and an insult to needy Americans. Furthermore, housing stock in rural America is so inadequate compared to urban areas, that it could never support the voucher system as proposed by the Administration. Vouchers only work when there is an extant stock -- not the case in rural America.

## Conclusion

Congress has supported the Section 515 program in the past and we urge you to do so again in FY87 at the FY86 level of $700 million. The program represents a highly successful public private partnership and should stand as a model for what can be done to benefit all Americans when the federal government provides the impetus for responsible private participation. Thank you. I would be happy to answer any questions.

## Housing Assistance Council

### STATEMENT OF HAROLD O. WILSON, EXECUTIVE DIRECTOR

Senator Abdnor. Our next witness is Harold Wilson, executive director of the Housing Assistance Council.

You are welcome, Mr. Wilson. Housing has a lot of interest here today, as you can tell.

Mr. Wilson. Thank you very much, Mr. Chairman. I thank you for the opportunity to appear before the Committee on Appropriations for Agriculture, and specifically the Farmers Home Administration housing programs.

For the record, my name is Hal Wilson, and I'm the executive director of the Housing Assistance Council, a national, nonprofit housing technical assistance and seed money loan fund organization that has been serving rural communities for about 15 years now.

We have a full testimony, Mr. Chairman, that we would like to submit for the record.

Senator Abdnor. It will be made a part of the record.

Mr. Wilson. Thank you very much. I will summarize that testimony and make my comments very brief as well, because this committee has been very, very supportive of the Farmers Home Administration housing programs.

For the last few years when the programs have been threatened with termination, this committee has seen to it that Farmers Home housing has continued at some funding level that has been very, very important for rural low-income families. I would like to express very much our appreciation for that.

I would simply ask once again, as prior speakers have done, that this committee support with its appropriations levels, the budget levels that have been passed by the Budget Committee and by the Senate. As I understand it, that would be for fiscal year 1987, the fiscal year 1986 budget levels after the 4.3-percent Gramm-Rudman cut.

We urge that level, Mr. Chairman, not because we think that it's adequate, not because we think that it will go a long way toward relieving housing conditions in rural communities, but because we feel that's probably a level that we will be able to get this year because of the severe budget constraints that we are faced with.

As you know, the Farmers Home housing programs have already been cut significantly, and it would be a disaster for rural poor to see them cut any further. We urge this committee, with your appropriations, to support that level.

I would like to mention that, from our perspective, working with nonprofit groups around the country, the Farmers Home Administration housing programs have been very effective and have served a significant need over the years. During the 1970's, the incidence of substandard housing in rural America was reduced significantly, somewhat over 50 percent, I believe. We feel that the 515, the 502 and the other programs of Farmers Home played a significant role in that reduction.

Even so, the housing need continues to grow. If the Farmers Home Administration programs are terminated or eliminated, we feel that there are no vehicles presently available, either among the States or in the Federal Government, or in the private sector, to make up for the loss that rural communities would experience by the loss of Farmers Home programs.

We have done a survey of State housing programs that do exist now, and even though the States are beginning to play a more significant role in delivering housing assistance to the poor, most of their programs are fairly small, are not very significantly funded, and it would be impossible to fill the void that would be left.

There are some States, Mr. Chairman, that have no, or very few, housing programs at all to help take up the slack that would be experienced.

So, in conclusion, Mr. Chairman, I would like to thank the committee once again for its assistance and persistence over the years and encourage your continued interest and support for these very beneficial and worthwhile programs in the future.

Thank you very much.

Senator ABDNOR. We thank you, Mr. Wilson, for your help in this field. As you say, the committee has been very concerned about housing assistance, rural housing and rural development.

The problem hasn't gotten any better over the years. It's just that the dollars seem to get less. We appreciate your understanding and your help.

I'm sure the committee will look forward to studying your testimony and working with you. Thank you very much.

Mr. WILSON. Thank you, Mr. Chairman.

[The statement of Mr. Wilson follows:]

## STATEMENT OF HAROLD O. WILSON

Mr. Chairman and members of the Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies, I am Harold O. Wilson, Executive Director of the Housing Assistance Council. The Housing Assistance Council (HAC) is a national nonprofit housing organization which seeks to assist in the provision of housing for low-income families by providing technical assistance and seed money loan funds to rural development organizations. For 15 years, HAC has examined rural housing need and monitored the federal government's efforts to meet that need.

Mr. Chairman, as you know, the rural housing programs have more than absorbed their share of cuts over the past 3 years. The current FY'86 funding level of $2.3 billion represents a $1.15 billion reduction from the 1985 level. Gramm-Rudman took away an additional 4.3%, and the Administration is now proposing a deferral of $700 million. These reductions would bring the total cuts to 51.2% of the 1985 funding level.

We urge the Chairman and Members of this Subcommittee to oppose the proposed deferral of rural housing funds, and further urge the continued support of the FmHA rural housing programs. The Administration's budget package would terminate the FmHA rural housing programs, transferring the responsibility for rual housing, but neither the funding or the programs, to HUD. If accepted, this nation will lose the very mechanism that, over the past half century, has produced over two (2) million units of decent housing for the citizens of rural America.

Mr. Chairman, we support the National Rural Housing Coalitions recommendations for FY'87 level of funding at the current FY'86 level.

The FmHA rural housing programs are a vital resource for rural America. The assistance provided by the agency is irreplaceable. Actions, be they in the Authorizing, Appropriations, or Budget Committees, should only be taken after very careful analysis of the benefits this nation continues to receive from these programs. We are not here today to advocate any sweeping increases in funds or dramatic new programs. We are here to request that this Subcommittee, when acting on the FY 1987 Agriculture Appropriation Bill, provide for FY 1987 the FY 1986 level of funds to permit the continuation of these essential programs.

The following points summarize our arguments in support of the continued existence of the FmHA rural housing programs:

i) Rural America continues to house a disproportionate share of our nation's poor. The 1980 Census identified 3.5 million poverty-level households in communities eligible for FmHA services. Rural poverty is getting worse; in 1983, the nonmetropolitan poverty rate was 18.3 percent, up sharply from 17.8 percent in 1982.

ii) Over 2.2 million units of rural housing in the FmHA service area are substandard.

iii) The need for comprehensive FmHA services continues unabated. In addition to the housing need, pollution of existing rural water systems has reached alarming proportions, and small farmers, as a class, are in desperate straits.

iv) The existing housing stock in rural areas is insufficient. Rural need cannot be met solely by local preservation efforts or by some modest and future voucher assistance program, because there is neither enough housing suitable for rehabilitation nor enough rental stock.

v) FmHA-financed housing is "bargain-priced". In 1984, existing units financed by FmHA cost 54.2 percent of the national median and new units financed by FmHA cost only 39 percent of the national average.

vi) The balanced FmHA homeownership/rental resources programs constitute a common sense approach toward meeting the housing need. For example, it costs less to subsidize those low-income families who can afford FmHA homeownership than to provide them with rental subsidies. On the other hand, the FmHA rental program permits the rental option for the poor communities which often have no decent rental housing stock.

vii) FmHA has a strong performance record.

viii) There is no viable decent housing alternative for the rural poor. A private housing credit delivery system for low-income families does not exist in rural America. With its 1,937 county, 270 district, and 46 state offices, FmHA has in place a delivery network well-suited to the peculiar problems associated with a dispersed population. No other agency possesses this type of delivery system.

ix) FmHA serves special rural populations with unique problems. Indians experience poverty compounded by land tenure issues which prevent any private housing from developing on reservations. Private sector financing mechanisms for land acquisition and subsequent housing and other development do not exist in Indian country. Only FmHA has a program specifically targeted for recovering lost lands within reservation boundaries.

The need for continued rural housing assistance is clear; and the need for continued FmHA housing assistance is obvious from a review of the Agency's achievements.

Over the past fifteen (15) years, this nation has witnessed dramatic progress in improving the quality of life for families in rural communities. While by no means eliminating poverty, substandard housing, or unemployment, FmHA assistance has provided many low-income people with an opportunity to achieve a better way of life. Over one million units of substandard housing in rural areas were replaced during the 1970s.

From 1970 to 1980, FmHA made over 1.2 million single family housing loans to rural families. Full implementation of the interest subsidy program during this period allowed service to low-income families unable to afford high mortgage rates. For the first time in their lives, these families had a chance at the American dream.

During the same period, FmHA made over 11,000 Section 515 loans, which produced 186,250 units of rental housing. In addition, 11,245 units of housing for migrant and seasonal farmworkers were produced. Rural low income families were further helped by the rental assistance program, which provided financial assistance to reduce the rental payments of qualified tenants.

FmHA and other federal resources were not adequate, however, to eliminate overcrowded, deficient housing occupied by low-income households, or affordability problems in rural areas.

In 1981, three-fifths of nonmetro very low-income households lived in housing defined by HUD as "having problems" - overcrowded, structurally deficient, and/or with high rent burden. The number and proportion of such housing increased since 1975, from 55.3 percent and 3.8 million households to 59.7 percent and 4.5 million households.

According to the Census, rural areas in 1980 contained 1.7 million occupied units which lacked plumbing or were overcrowded; i.e., which are deemed substandard by conventional measures. Within FmHA service areas, there are still 2.2 million units which are overcrowded or lack complete plumbing. According to more detailed data provided by the Annual Housing Survey, nearly a million rural substandard units were occupied by low-income households (with annual incomes of less than $9,000).

By HUD's criteria for structural quality - the most valid measures now in use - in 1981 there were 3.4 million occupied nonmetro units which were physically inadequate. (HUD has not published equivalent data for rural areas.) They constituted 13 percent of the nonmetro occupied housing. Of these, 1.4 million were severely inadequate.

Worst case households are those which are both poor and in inadequate housing. There were 1.9 million very low-income nonmetro households in inadequate housing as defined by HUD. One million were in severely deficient units. Twenty-two percent of the very low-income owners and 29% of the very low-income renters in nonmetro areas were in inadequate housing.

In addition, the Census reports 1.2 million rural households living in mobile homes manufactured before 1975; i.e., before a federal standard for mobile home safety and construction quality was implemented. More than half of the occupants of pre-standard mobile homes are low-income households.

These stark facts illustrate the continued need for new housing and housing rehabilitation.

TABLE I: Occupied Deficient Units in 1981

| | Metro | | Nonmetro | |
|---|---|---|---|---|
| | (Millions) | (% Total) | (Millions) | (% Total) |
| Total Occupied | 56.7 | 100.0% | 26.5 | 100.0% |
| Physically Inadequate | 4.3 | 7.5% | 3.4 | 13.0% |
| Severely Inadequate | 1.5 | 2.7% | 1.4 | 5.5% |
| Owners | | | | |
| Occupied | 34.8 | 100.0% | 19.6 | 100.0% |
| Physically Inadequate | 1.5 | 4.2% | 2.0 | 10.1% |
| Severely Inadequate | .4 | 1.2% | .8 | 4.0% |
| Renters | | | | |
| Occupied | 22.0 | 100.0% | 6.9 | 100.0% |
| Physically Inadequate | 2.8 | 12.7% | 1.5 | 21.2% |
| Severely Inadequate | 1.1 | 5.1% | .7 | 9.6% |

Inadequate Units Occupied by Very Low-Income Households

| | Metro | | Nonmetro | |
|---|---|---|---|---|
| | (Millions) | (% Total) | (Millions) | (% Total) |
| Total Occupied | 14.3 | 100.0% | 7.5 | 100.0% |
| Physically Inadequate | 2.0 | 14.2% | 1.9 | 25.0% |
| Severely Inadequate | .8 | 5.8% | 1.0 | 13.8% |
| Owners | 5.6 | 100.0% | 4.4 | 100.0% |
| Physically Inadequate | .5 | 17.2% | 1.0 | 22.0% |
| Severely Inadequate | .2 | 3.2% | .6 | 12.6% |
| Renters | 8.8 | 100.0% | 3.0 | 100.0% |
| Physically Inadequate | 1.5 | 17.2% | .9 | 28.9% |
| Severely Inadequate | .7 | 7.5% | .5 | 15.5% |

Source: Department of Housing and Urban Development, Office of Policy Development and Research, "Attaining the Housing Goal?", by Iredia Irby, July, 1984.

The composite figure for overcrowded as well as deficient units occupied by very low-income nonmetro households is 2.1 million units. Thus, by accepted standards for housing quality, there is a need for approximately 2 million new or upgraded units to house rural low-income households. Because nonmetro poverty has increased since these figures were reported (1980-81), it is likely that the current figure would be higher.

In 1981, nearly $15,000 was needed by a nonmetro family of four to meet annual living costs included in the "lower budget" established by the Bureau of Labor Statistics. In 1984, an estimated $17,000 was needed for nonmetro renter-occupied households, and $20,000 for owner-occupied households. (See appendices for details.) The lower budget assumes that less than a fourth of household income is spent on shelter.

Unfortunately, for nonmetro households of all incomes, gross rent as a percentage of income increased from 19% in 1970 to 25% in 1980; i.e., rents increased far faster than did income. Mobile home rent consumed a larger share (26%) of rural incomes. The mobile home rent burden was greatest for minorities and poverty-level households: 30% for rural black households, over 50% for poverty-level households, according to 1980 Census data.

The 1981 Annual Housing Survey reports that 2.6 million nonmetro households with incomes of less than $10,000 spent more than 35% on shelter costs. Most of these households earned less than $7,000. Over a million spent more than 60% of their incomes on housing. Over half of these had household incomes of under $3,000, and thus had less than $1,200 remaining with which to cover food, clothing, and other household expenses for the year. In the FmHA service areas alone, 1,309,312 tenant families have incomes of $9,999 or less and pay more than 35% of income for rent. Of these families, 831,592 (63.5%) have incomes of less than $5,000.

These households had fewer than four members, on the average. However, even using the Bureau of Labor Statistics (BLS) nonmetro lower living budget for retired couples, they would not have enough left after meeting shelter costs to afford basic expenses.

During December 1984, FmHA multifamily housing staff estimated that 138,750, or 44.8%, of the tenant households in Section 515 financed housing experienced a rent overburden.

Thus, in addition to poverty households now receiving assistance, as many as 2.6 million nonmetro households need assistance to cover shelter costs.

Rural needs include those of special populations for which remedies are difficult, even when government actively seeks to fund housing assistance. Migrant farmworkers are a case in point. A 1980 survey by the Interamerica Research Associates, under contract to the Farmers Home Administration, found that 750,000 new or substantially rehabilitated units for migrant farmworkers were needed.

On Indian reservations, there is an unmet housing gap of some 90,000 units, up from 63,000 in 1970. The private sector cannot and will not address this need.

Many low-income rural homeowners need assistance to improve their water and/or waste disposal facilities. According to a survey conducted by Cornell University for the U.S. Environmental Protection Agency, two thirds of rural households in 1982 had unacceptably contaminated water, with coliform bacteria the most common contaminant. The Census of Housing reports that in 1980 nearly 2 million rural households relied on dug (not drilled) wells and undefined sources of water.

Nearly 16 million relied on septic tanks or cesspools for sewage disposal. According to a recent Soil Conservation Service study, many of these were in areas deemed not suitable for septic fields, and thus contributed to water contamination. Undefined means of sewage disposal were used by 1.3 million rural households. One and a half million rural households had either no bathroom or only a "half bath."

Thus, the Census indicates at least two million rural households need upgraded water and waste disposal facilities. The EPA study indicates a far higher number, perhaps as many as 14 million households, need facilities to eliminate water pollution, particularly contamination by human waste.

The Administration's budget implies that rural housing needs will be financed by the private sector, but proposes that government assistance will be provided by the Department of Housing and Urban Development (HUD). There are serious, if not fatal, flaws in the proposal which would replace direct credit with a guaranteed lending system which has not previously worked in rural areas. A viable guaranteed housing program is dependent on credit institutions geared and able to function as mortgage lenders.

During 1984, there were more bank failures than in any year since 1938, and most of those failures were in rural areas. Traditionally conservative, rural banks have been increasingly constrained by farm loan delinquencies. According to a recent study by the Economic Research Service of USDA, banks in agricultural areas have been particularly vulnerable to failure and other financial setbacks in recent years. Banks with agricultural portfolios are a considerable rural credit resource; nearly 1,300 of the 8,000 nonmetro banks had over half of their loan funds in agriculture. The jeopardy in which these banks are placed encourages them to collect from delinquent borrowers, contributing to a level of farm and home sales, auctions, and foreclosures exceeding any since the Great Depression.

The availability of private credit means little to low income families, who require some form of subsidy to permit homeownership, and the HUD ownership programs which are to be continued in 1988 are not subsidized. Table IV illustrates the percentage of income required to carry a very modest mortgage, taxes and insurance.

TABLE II: Percentages of gross income required to carry principal, interest, taxes and insurance (PITI) for a modest home with a 30 year, 10.5 percent mortgage.

Mortgage - $40,000
Annual Payment - 4,392
Taxes - 400
Insurance - 140
PITI - $4,932

| INCOME | PERCENTAGE FOR PITI |
|---|---|
| $15,000 | 32.9% |
| 13,500 | 36.5% |
| 10,000 | 49.3% |
| 8.500 | 58.0% |
| 7,000 | 70.5% |

The above data are not shelter costs. Utility and maintenance costs are not included.

We recently examined data developed by the National Association of Realtors on median priced existing housing sales and minimum qualifying income; additionally, we looked at average new home cost and income data developed by the National Association of Homebuilders. These data illustrate who homebuyers were since 1974. On the nex page, the 1983 data are contrasted to that of the FmHA 502 program:

Median price existing housing - $70,300
Average price new housing - $89,800
Average price FmHA housing - $37,743

There is ample evidence to conclude that sufficient housing credit is lacking in rural areas, and where that credit is available it serves a higher-income clientele. The need for credit and assistance for low- and very low-income households has already been documented. Therefore, termination of FmHA housing programs will effectively eliminate any possibility of adequate housing for several million rural families.

The problems facing rural tenants and the budget solutions proposed to meet these problems yield additional cause for concern. Under the budget rural areas presumably will be the planned beneficiaries of half of HUD's 97,500 assisted units, available beginning in 1988. Even this concession to rural need must be examined carefully and questioned. Because HUD plans to use housing vouchers as its future assisted housing program several questions must be asked: Are there enough suitable rental units available? Who will finance the new and replacement rental units needed in rural areas? If financed, will vouchers make new units affordable to low-income people?

HAC has long supported the FmHA rural housing programs. Since the 1960s these programs have been shaped to meet the unique requirements of rural America. The information and data indicate a continuing and unmet need for services for the rural poor. The Farmers Home Administration programs and delivery system are best equipped to deal with this need.

The Aministration's budget proposal leaves unanswered how the housing needs of the poor will be met. Even if private credit was universally available in rural areas, low- and very low-income families could not afford to use it. State and local housing finance efforts utilize tax-exempt offerings to reach families with incomes lower than those of families who can afford private credit, but these local programs do not serve the poor or the near poor, unless supplemented with deep federal subsidies. The expectations, associated with current budget proposals, that everyone would assume a fair share of the discomfort yielded by the cuts, is disingenuous at best. The budget proposals terminate the FmHA rural housing and community development programs, and in so doing, exacerbate an already impossible situation for the rural poor.

Shelter is not an expendable item that can be cut back or eliminated when times are difficult. It is an essential element required for the support of human life, an element that also has a direct bearing on the creative and productive potential of people. A proposal which would eliminate programs of assistance that have proven successful for years in raising the quality of life for the rural poor, but which at the same time offers no realistic alternatives, is questionable on both moral and economic grounds. It reflects a policy that is shortsighted at best.

Rather than being eliminated or cut beyond useful capacity, the FmHA programs should be reformed to assure their efficiency and increase their ability to serve the poor. The economic and social problems of rural communities call for creative solutions, not the burial of programs created to address exactly the problems we face in rural America today.

We urge the members of this Subcommittee to keep faith with the families of rural America. The budget proposals which would terminate the FmHA rural housing programs should be firmly rejected. We strongly endorse the current appropriation levels to ensure the preservation and continuation of the successful rural housing programs of the FmHA.

## HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

### STATEMENT OF FRANK E. SAMUEL, JR., PRESIDENT

Senator ABDNOR. Mr. Frank Samuel is our next witness. He is president of the Health Industry Manufacturers Association.

Mr. Samuel, we thank you for your attendance today, and we are anxiously waiting to hear from you. I'm sorry we have to be so short with everyone.

Mr. SAMUEL. I understand and I sympathize entirely. You have a lot of people to hear.

We have a statement which, as with the other witnesses, we would like to have inserted in the record. I have a few points that I would like to mention.

My testimony shifts your focus to the Food and Drug Administration. Among the many products that the Food and Drug Administration has jurisdiction over are medical devices and diagnostic products. These include things like pacemakers and x-ray machines, as well as many simpler and less expensive kinds of products.

Most of the companies in this field are very small companies. Of our 300 members, 200 of them have less than $20 million in sales. So, what we are dealing with today is not just the problem affecting large Fortune 500 companies, but a very great multiplicity of very small companies for which Federal requirements, Federal redtape, and Federal delays are the next thing to their life support system.

The significance of delays ultimately, however, is felt by patients, not just by corporate America. It's there I think that we have our major concerns, because all of the signs for product approvals in our industry at FDA are bad.

We have included some information with our statement which basically indicates that the work force at the FDA Center for Devices has been going down over the past few years. They have lost something like the equivalent of 70 FTE's. At the same time, their workload has been going up.

In effect, our industry, as it's required by law, is submitting more products for FDA review and approval. So, we have a situation where product delays at the agency are increasing. They appear to be increasing pretty inexorably, and we think the situation is going to get worse unless drastic attention is paid to it.

Two solutions: The first solution is that FDA has to do a better job of managing its own resources. We have not been reluctant to make suggestions to Commissioner Young about how he ought to use his resources better, stop doing some things he doesn't need to do, and so forth.

The arithmetic is pretty inexorable. Less work force, more workload can only be solved in the final analysis by some additional people that work on product review. It's really as simple as that.

So, our recommendation to the committee is that $5 million be added to the appropriation for the FDA, specifically for the purpose of device and diagnostic product approvals. That's roughly half of what we think they really need to get the job done. But, frankly, we are willing to work with them and work with the subcommittee in an effort to see that they use their existing resources as wisely as possible.

So, I want to basically leave you with two thoughts. First of all, there is a problem, and a growing problem. And, second, there is probably going to be the need, after all is said and done, for additional resources.

We would like to work with the subcommittee and with the agency to see that that happens.

## PRODUCTS SUBJECT TO FDA APPROVAL DELAYS

Senator ABDNOR. Well, we certainly thank you, Mr. Samuel. I will only take a second. I need to ask you something about this statement.

Mr. SAMUEL. All right, fine.

Senator ABDNOR. Could you give me some examples of some of the kinds of medical products that are subject to substantial FDA approval delays?

Mr. SAMUEL. Surely. Virtually any implantable product, whether it's an artificial hip—I'm sure all of us know people who have artificial hips that have been implanted—is an example of a product that would have to go through substantial FDA review.

Let me give you one example of a recent product. It's something called an implantable defibrillator. Now, that highfaluting term means that it's a little device that's put inside the body that applies electrical stimulation to the heart in patients who are subject to irregular heartbeat.

Now, when irregular heartbeat happens in many of us—it happens occasionally in all of us—the heart self-corrects and there is no problem. In some patients, however, they basically drop dead. Now, this implantable device will sense that irregular heartbeat and apply the necessary electrical stimulation, a small shock. The first of these devices was approved by FDA late last year. At that time, it had gone through 4 years of clinical trials and 19 months—additional months—of FDA review.

Now, when that approval was announced, the Secretary of the Department said that the Department expected that 10,000 to 12,000 lives would be saved because of this device. Now, if that device, in other words, had been approved 1 month earlier, by HHS's own statistics, 1,000 additional people would be living today.

Senator ABDNOR. Do you know why the delay? Did they give you a good reason?

Mr. SAMUEL. Basically, it's a workload, work force problem. There are not enough people to deal with the masses of clinical information that has to be submitted. And, frankly, there is a question about the FDA's ability to keep up with all of these advances in medical technology.

They simply don't have the quality or quantity of work force they need.

Senator ABDNOR. It's not because they are concerned about the product itself?

Mr. SAMUEL. There is no question that they have a legitimate concern about new products such as this. But the problem is that the law says that FDA should act on applications like this in 6 months.

The average time that FDA takes now to act on products like this is 15½ months. The defibrillator took 19 months.

So, even if we say this is the first of these products, it really ought to take longer than 6 months, it might even take a little longer than the average—although we think the average is unnecessarily high—you still come down to the fact that for every month that FDA added to that process, people died. Now, if we put a product on the market that was found to have caused 1,000 deaths, there would be investigative hearings in a variety of locations, and it would be a long time until we heard the end of that. But, if a similar number of people are put at risk because of these delays we are talking about, nobody hears much about it. It's all disbursed in the—sort of in the background.

So, we think we are dealing with a real patient problem, Mr. Chairman. It's hard to quantify. I'm not going to stand here and say that that particular product ought to have gone through in 6 months or 15 months. These are serious, these are life and death problems, and they have to be considered very carefully. But that means that FDA has got to have the right kind of people in the right numbers. And today, they don't.

Senator ABDNOR. All it takes is bucks, huh. Well, thank you very, very much.

Mr. SAMUEL. Thank you, sir.

[The statement of Mr. Samuel follows:]

## STATEMENT OF FRANK E. SAMUEL, JR.

Mr. Chairman, I am Frank E. Samuel Jr., President of the Health Industry Manufacturers Association (HIMA), the trade association of the medical device and diagnostic products industry. Small companies comprise the bulk of our industry; two-thirds of HIMA'S 300 members have annual sales of less than $20 million.

Our industry's goal is to save and improve patients' lives. To do that, HIMA companies develop technologies -- from artificial organs to contact lenses -- that are often more akin to satellites than toasters, or even automobiles. For many devices, FDA requires a premarket approval, like that required for new drugs.

Patient care brings me here today because the Center for Devices and Radiological Health (CDRH) does not have sufficient resources to approve expeditiously the devices patients need.

I want to leave two points with the Committee:

- Despite progress under Commissioner Young's Action Plan, the resources proposed in the Administration's fiscal 1987 budget are insufficient to arrest a growing device lag. We believe the average length of device approvals could, in the near future, exceed the average length of drug approvals. An additional $5 million for CDRH -- about 1 percent of FDA's total budget -- could be a stitch in time. We ask that this $5 million for CDRH be used to fund 60 to 70 new people to work specifically on medical device and diagnostic product reviews.
- CDRH's resource shortage is not a mere budgetary abstraction. It has real consequences -- for the health of patients, for the incubation of tomorrow's advances, and for the competitiveness of the nation.

### Growing Device Lag

Drug approval delays help put the device lag in context. Commissioner Young has testified that the average length of a new drug approval is 24 months. He said that FDA, through steps in the immediate term, hopes to cut that average to 18 months.

The average length of a device premarket approval (PMA) is approaching 16 months -- a period that, based on 1982-86 data, will likely grow. If it does, the average length of a device approval could, in the near term, exceed the average length of a drug approval.

The trend is clearly toward lengthening product review times and substantial delays for the public. The attached table (Attachment I) shows that the number of days required by FDA to review and approve product submissions in all categories is increasing. Investigational Device Exemptions (IDE's) -- the first steps in the approval pipeline and harbingers of future PMA's -- are now the fastest growing component of CDRH's product approval workload. In FY 1980, FDA product approval staff spent 10% of their time on IDE's, in FY 1985, that had jumped to 25%.

## The Price of Delay

What this data cannot convey is the price -- in lives and safety -- that FDA delays exact from patients. Getting a new advance into the market is as important to the public health as getting a quack product off.

Last year, FDA announced approval of an implantable cardiac defibrillator, 19 months after the application was filed. This period was added on to the four years the defibrillator was tested under an IDE. When it was approved, Secretary Heckler estimated that 10,000 to 20,000 lives could be saved each year by use of the defibrillator. We believe those lives should and could have been saved earlier.

Other products that have life-saving and life-enhancing capabilities are taking much too long to get through the approval process. The Lincoff balloon catheter, a great improvement for eye procedures, took 20 months to get approved. The artificial knee and the artificial hip are devices which enable patients to resume normal lives with their families. The knee took 20 months to approve and the hip took 16 months.

Even very familiar products like contact lenses can take an extraordinarily long time to be approved. One rigid gas permeable lens, similar to three or four others already being marketed, has been pending in FDA for two and a half years and still has not been approved.

That sums up the problem. But what are the causes and what can be done?

## Efficiency Gains

The first area that must be examined is agency efficiency. Our Association is never reticent about identifying opportunities for CDRH to realize efficiencies. Just last year, a task force of our Board studied the product approval process and made recommendations for streamlining it. The recommendations ranged from implementing a document tracking system to making specific regulatory reforms (such as eliminating unneeded legal review of scientific data). CDRH has acted on several of our recommendations and that, together with the Commissioner's Action Plan and CDRH management initiatives, has led to improvements in the approval process. (Attachment II summarizes the actions that have been taken.)

Steps to increase efficiency are a top priority and should continue. But they alone are not enough.

## Declining Resources

To cut review periods significantly, we must address the ruthless arithmetic that underlies the device lag: more product applications, plus declining resources, equals longer product reviews.

CDRH's resources simply do not allow it to keep up with its workload. Since 1981, CDRH has lost over 70 full-time equivalents (FTE's). The current workforce for the Office of Device Evaluation is 180 FTE's, and CDRH estimates that on the order of 100 additional FTE's would be needed to cut review times significantly and reduce the PMA backlog. (See Attachment III.)

Personnel shifts within the agency cannot realistically produce the 100 FTE's needed. CDRH has already reassigned staff to product approvals, and that option is virtually exhausted. To draw personnel from other FDA functions could impede the agency's ability to deal with quack products and public health emergencies.

## Administration Budget

The Administration's FY 1987 budget does not make a serious attempt to address CDRH's resource shortage. The Administration budget assumes $69.4 million for CDRH, 1.3 percent more than the FY 1986 budget. FDA budget documents show that none of this modest increase would go for product approvals.

We are mindful that some agencies are being marked for outright extinction. Nonetheless, the stakes here are high, and the Administration's budget for CDRH is, at best, business as usual.

## Funding Request

We propose an additional $5 million in the FY 1987 budget for CDRH, to be used to fund 60 to 70 new people to do product reviews. These new people could help CDRH cut review periods and the backlog of applications. If with this money CDRH shows concrete progress, and continues to make efficiency gains, the Committee should consider FY 1988 funding for remaining personnel needs.

Our $5 million proposal represents about a 7 percent increase over the Administration's FY 1987 budget for CDRH and about a 1 percent increase over FDA's total budget. This proposal is reasonable, and there are good grounds for the Committee to approve it.

We would also point out that $11.4 million of FDA's budget request is assumed to come from funds that would be available only if new legislation were enacted. Should such required legislation not be approved by the Congress, FDA's current activities would be significantly underfunded, and this might affect CDRH. The Committee should keep this in mind in making FDA appropriations and assure that agency functions in CDRH are not affected by it.

## Real Issues

When we cut through the review periods and budget figures, the real value of an adequately funded CDRH comes down to things like these:

- Patient Care. It's not video games that are at stake. The issue is the health of patients, and we can't think of anything more important.
- Innovation. It's hard enough to marshal the people, money, and science to develop a product that may not be ready until the next decade. Add the prospect of open-ended delays at FDA, and the appetite of the innovator is less than whetted, especially for the small companies that make up the bulk of our industry. Delays are particularly threatening for device and diagnostics technologies, which, despite long development periods, can change so fast that patent terms are usually irrelevant. Finally, even if everything goes right, innovators face relatively small markets through which to recover their investments.
- Cost-Effectiveness. Health care is making an historic shift towards cost-effectiveness. But technologies can't participate in this revolution if they can't get out of FDA. It makes sense to encourage expeditious review of products like balloon catheters (which save Medicare about $10,000 for each bypass operation they replace) and new infusion technologies (which allow treatment in low-cost home settings).
- Global Competitiveness. Our industry is one of the few in the manufacturing sector that, overall, has a balance of trade surplus. But we slipped into a deficit with Japan two years ago, and, just last year, into a deficit with West Germany. (Attachment IV summarizes industry trade data.) "There is growing evidence that the United States is falling behind the world in the availability of innovative new products," concluded the President's Commission on Industrial Competitiveness. "[This] is a threat for biotechnology and medical devices." The nation should exploit its competitive strengths, not shoot itself in the foot.

HIMA urges the Committee to approve an additional $5 million appropriation to fund 60 to 70 new people in CDRH to do product reviews. We offer our assistance to the Committee and its staff on this matter.

## ATTACHMENT I

### PMA's
(Statutory deadline of 180 days)

| Fiscal Year | Days |
|---|---|
| 1982 | 294 ( 9.8 mo.) |
| 1983 | 329 (11.0 mo.) |
| 1984 | 470 (15.7 mo.) |
| 1985 | 372 (12.4 mo.) |
| 1986 (3 mo.) | 463 (15.4 mo.) |

### PMA Supplements

| | |
|---|---|
| 1984 | 140 ( 4.7 mo.) |
| 1985 | 240 ( 8.0 mo.) |
| 1986 (3 mo.) | not available |

### Investigational Device Exemptions (IDE's)
(Statutory deadline of 30 days)

| | |
|---|---|
| 1984 | 38 |
| 1985 | 37 |
| 1986 (3 mo.) | 47 |

### IDE Supplements

| | |
|---|---|
| 1984 | 45 |
| 1985 | 33 |
| 1986 (3 mo.) | 150 |

### 510k Premarket Notifications
(Statutory deadline of 90 days)

| | |
|---|---|
| 1984 | 70 |
| 1985 | 76 |
| 1986 (3 mo.) | 85 |

## ATTACHMENT II

## IMPROVEMENTS IN THE PRODUCT APPROVAL PROCESS

Since October 1985, a substantial effort has been undertaken by the Center for Device and Radiological Health to reduce delays in FDA's product approval process for medical devices. These efforts respond not only to recommendations of the HIMA Device and Diagnostic Product Approval Task Force, but also to recommendations of the Center's Criticism Task Forces (internal CDRH groups established to make recommendations to the Center) and the Commissioner's Action Plan. A few of the most significant efforts are described below:

1. Improving the Information Flow. These changes include:

   - Establishing an automated document tracking system for PMAs, 510(k)s, and IDEs.
   - Hiring a consultant to recommend further improvements in information processing.
   - Exploring the possibility of getting outside support from an academic institution to improve information processing.
   - Finalizing plans for a system to permit electronic transmission of summaries of safety and effectiveness data.

2. Making the Ground Rules Clear. These developments include:

   - The receipt of nominations by HIMA for a HIMA fellowship to develop guidelines for PMAs, 510(k)s, and IDEs.
   - Meeting with FDA to discuss plans for the guideline fellowship.
   - HIMA has held several PMA workshops and plans to hold a seminar when FDA publishes its PMA regulation.

3. Building Regulatory Reforms. These developments include:

   - Removal of FDA's Office of General Counsel (with minor exceptions) from the PMA review process.
   - The establishment of a HIMA task force to make recommendations to FDA to streamline the PMA supplement and IDE review processes.
   - Office of Device Evaluation (ODE) has instituted a number of reforms, including completion of ODE review before a PMAA is submitted to an advisory review panel and issuance of guidelines for when a supplemental PMA is required to be submitted to an advisory review panel.
   - CDRH appears to be seriously considering use of its reclassification authority to reclassify several devices, including stainless steel sutures, magnetic resonance imagers, Yag lasers, automated differential cell counters, and infant radiant warmers.

## ATTACHMENT III

## FDA BACKLOG*

### PMA APPLICATIONS

| Fiscal Year | Submission | Decisions | Pending Submissions At End of Year |
|---|---|---|---|
| 1982 | 90 | 39 | 70 |
| 1983 | 76 | 50 | 81 |
| 1984 | 65 | 42 | 73 |
| 1985 | 97 | 37 | 103 |
| 1986 (5 mo.) | 2 | 30 | not yet available |

* These figures include only applications which are active at FDA, not those which have been sent back to sponsors for revisions.

## ATTACHMENT IV

### U.S. Medical Technology's Declining Trade Position, 1983-1985

a. The U.S. device and diagnostics industry lost domestic market share to imports, and historical overall positve trade balance declined because export growth did not keep pace with imports:

| | U.S. World Trade 1983 ($M) | U.S. World Trade 1984 ($M) | U.S. World Trade 1985 ($M) | % Change 1984-1985 |
|---|---|---|---|---|
| Exports | 2,212 | 2,296 | 2,414 | 5.3 |
| Imports | 1,125 | 1,422 | 1,741 | 22.4 |
| Balance | 1,087 | 874 | 676 | -22.0 |

b. Japan and West Germany were principal competitors, and each increased their balance of trade with the U.S.:

| | U.S. Japan Trade 1983 ($M) | U.S. Japan Trade 1984 ($M) | U.S. Japan Trade 1985 ($M) | % Change 1984-1985 |
|---|---|---|---|---|
| Exports | 241 | 263 | 284 | 7.9 |
| Imports | 232 | 332 | 431 | 29.8 |
| Balance | 9 | -69 | -147 | -113.0 |

| | U.S. W.Germ. Trade 1983 ($M) | U.S. W.Germ. Trade 1984 ($M) | U.S. W.Germ. Trade 1985 ($M) | % Change 1984-1985 |
|---|---|---|---|---|
| Exports | 177 | 204 | 223 | 9.3 |
| Imports | 368 | 396 | 512 | 29.3 |
| Balance | -191 | -192 | -288 | -51.0 |

## CENTER FOR SCIENCE IN THE PUBLIC INTEREST

### STATEMENT OF MITCHELL ZELLER, STAFF ATTORNEY

Senator ABDNOR. Our last witness is Mr. Mitchell Zeller, staff attorney, and Mr. Bruce Silverglade—is he with you here? All right. I'm sure you will do a fine, fine job all by yourself.

Mr. Zeller, wind this up in a great fashion.

Mr. ZELLER. Thank you, Mr. Chairman. Last, but hopefully not least. My name is Mitchell Zeller. I am staff attorney with the Center for Science in the Public Interest.

Senator ABDNOR. Your statement will be put in the record, I assure you.

Mr. ZELLER. Thank you. I will briefly summarize a couple of major points in my testimony.

CSPI is a nonprofit consumer organization. Our interests are food and nutrition and related health issues. We were founded in 1971, and we have approximately 70,000 members nationwide.

I would like to discuss two of the issues that were in my prepared remarks—sulfiting agents and fast-food ingredient labeling. I know that this committee has had a longstanding interest and concern in the sulfite issue and FDA's handling of it. You have been on record for the last 3 fiscal years as expressing concern about the hazards of sulfites and FDA's response to those hazards, and we are very thankful for your interest and concern in the issue.

Since last year, there have been a couple of very important developments with sulfites that I would like to bring to the committee's attention. Last summer, there were two deaths from sulfites from uses previously not associated with the severe hazards. There was one death from sulfites in wine and a second death from sulfites in potatoes.

Now, we think that these events are important, because last August, much to our surprise and great thanks, FDA proposed to ban sulfites from fresh fruits and vegetables. As important a step as that was, the deaths from sulfites in wine and potatoes were linked to uses that are unaffected by FDA's proposed ban on fresh fruits and vegetables.

So, while that proposed action was a very important step in the right direction, there remained other uses of sulfites in the food supply that are equally as dangerous as the hazards posed by the use of sulfites in fresh fruits and vegetables. We think that similar vigorous and strong action is needed on some of these other uses.

Now, Congress has required FDA to complete its safety evaluation of sulfites by June 1 of this year. That date is approaching, and given FDA's track record on sulfites and its failure to respond to some of the deadlines that this committee first put into its report 3 years ago, we are very concerned that the agency is not going to be able to meet the deadline that Congress imposed for completion of the GRAS review.

I think it's important to see this in the context of diminishing agency resources, Gramm-Rudman, and the need to set effective and important priorities for the agency. We've heard the Commissioner talk a lot about how he thinks that health fraud and quackery are important concerns to the agency. While it would be nice to have the time and money to go after quack baldness curers and bust developers, which the agency has been interested in, we think that issues like sulfites—which is the only food additive in the last 20 years linked to actual deaths—should be one of the highest priorities at FDA.

So, we would urge this committee to maintain its vigilant watch over FDA's handling of sulfites and that appropriate action be taken if some significant period of time goes by with the June 1 deadline going unmet.

The second issue I would like to touch on is a new issue for CSPI.

Senator ABDNOR. Mr. Zeller, you will have to forgive me. I'm 20 minutes late for an appointment. I'm not taking your testimony lightly at all. It's just that I'm going to get shot if I don't go.

Mr. ZELLER. I appreciate it, Senator.

Senator ABDNOR. Thank you.

### INGREDIENT DISCLOSURE

Mr. ZELLER. Thank you. The second issue I would like to briefly touch on is a new issue for CSPI, and that is ingredient disclosure of fast foods.

When FDA passed the Food, Drug, and Cosmetic Act back in 1938, one of the concerns expressed in the legislative history was the problem of allergies or sensitivity to food ingredients. Right there in the legislative history is one of the important reasons why FDA requires ingredients to be disclosed on food labels.

In 1979, FDA and USDA agreed that that requirement extends to fast foods that are sold in packaged form. We think that there are two very important reasons why ingredients should be disclosed on the labels of fast foods.

One is diet-related disease, heart disease, and cancer, which is linked to diets that are high in saturated fat, of which fast foods are. The second health problem is food allergies. Many of the ingredients in fast foods can trigger adverse reactions.

In the absence of ingredient disclosure, people with these sensitivities are playing Russian roulette every time they eat a fast-food meal, not knowing if a food contains an ingredient that can trigger a reaction.

Americans spend nearly $50 billion per year on fast food, so it makes up a very large part of the American diet, and it's vital that people have this information at their disposal.

Last June, my organization, along with the New York State Consumer Protection Board and the American College of Allergists, petitioned FDA and USDA to enforce the mandatory ingredient disclosure provisions of the Federal law for fast foods. USDA denied the petition in December; FDA has yet to act.

We think that this is a vital public health issue. It's essential that consumers have this information at their disposal when they are making purchases in fast-food restaurants. We would urge the committee to express its concern over the agency's failure to enforce this very important provision of their respective statutes that Congress has delegated to FDA and USDA to enforce.

Thank you very much for your time. I would be glad to answer any questions.

### FDA DEADLINES

Senator COCHRAN [presiding]. What do you recommend as an effective way for this committee to get the FDA to meet deadlines? You said that it's unlikely that the June 1 deadline will be met on the sulfite study.

We don't have legislative jurisdiction over FDA. Should we hold them in contempt of Congress? What do you recommend?

Mr. ZELLER. In discussion with the staff, the possibility came up that if there was a need for a supplemental appropriation for FDA, perhaps as a condition imposed on the granting of supplemental funds that there could be some kind of promise or action from FDA to meet what would then have been a long-past deadline.

We think that there are possibilities within the appropriations process to keep FDA to your deadline. We would be glad——

Senator COCHRAN. Is it more important for them to meet a deadline or to do a careful and thorough study?

Mr. ZELLER. They have been studying sulfites since 1976. It's not a new issue before the agency.

We first alerted them to the hazards of sulfites in October 1982. There has been study after study of sulfites done.

In fact, we feel that rather than make decisions, FDA appointed a series of advisory committees to study sulfites once again. Those committees have met and completed action over the last 2 years, and, frankly, we don't think much more study of sulfites needs to take place, because the hazards of them are very well known, have been demonstrated in the medical literature, and have been reported to FDA by consumers. We think that the evidence is overwhelming.

Senator COCHRAN. We appreciate your being here and providing testimony to this hearing. You have a unique position I'm sure for many reasons, but one reason is that you are our last witness.

Mr. ZELLER. Thank you, Senator.

Senator COCHRAN. Thank you.

[The statement of Mr. Zeller follows:]

## STATEMENT OF MITCHELL ZELLER

Good afternoon. My name is Mitchell Zeller. I am a staff attorney with the Center for Science in the Public Interest. The Center for Science in the Public Interest is a non-profit consumer organization which specializes in food, nutrition and related health matters. CSPI was founded in 1971 and is now supported by approximately 70,000 members.

Today I would like to discuss three regulatory matters pending before the agencies subject to this committee's jurisdiction with which CSPI has been actively involved -- the "GRAS" Review of food additives, the need to disclose the identity of ingredients on fast food labels, and the need for neurotoxicity testing of medications and food additives. We believe our experience with the Food and Drug Administration on the GRAS Review and neurotoxicity testing suggests that a reallocation of budgetary resources together with a reordering of agency priorities is desperately needed. As for the fast food labeling issue, we are greatly concerned that FDA and the Department of Agriculture are not enforcing a key provision of federal labeling laws that Congress has entrusted to the agencies to implement.

### 1. FDA's Safety Review of Food Additives

Sulfiting agents are a group of food and drug preservatives that have killed at least eight persons and caused many other life-threatening reactions. The eight deaths resulted from reactions to sulfite-treated restaurant food. Since 1970, FDA has been reviewing the safety of all food ingredients, such as sulfites, that were previously considered Generally Recognized As Safe or "GRAS". In July 1982, as part of what is known as the GRAS Review, FDA issued a proposed rule affirming sulfites as safe for use in food.

FDA based its proposal to affirm sulfites as safe on a scientific literature survey completed in 1976. At no time between 1976 and 1982 did anyone at FDA update the literature search. In October, 1982, my organization, the Center for Science in the Public Interest, petitioned FDA to ban or severely restrict the use of sulfiting agents as unsafe. We took this action after discovering numerous studies published between 1976 and 1982 which demonstrated that sulfites pose a life-threatening health hazard to asthmatics and other sensitive individuals.

Since our petition, the deaths of at least eight persons have been closely linked to reactions to sulfite-treated restaurant food. All told, FDA has received reports of more than twenty sulfite-related deaths that are under investigation. Hundreds of other sulfite-sensitive consumers have suffered reactions ranging from mild skin rashes to life-threatening anaphylaxis, coma, and brain damage.

Congress has indicated its concern over FDA's handling of the safety review of sulfites. In the report accompanying the FDA appropriations bill for Fiscal Year 1984 this Committee stated it was "concerned about the quality and pace of FDA's safety evaluation of sulfites," and urged FDA to "set aside whatever funds and staff resources are necessary to publish a final rule governing the use of these agents by the end of 1985." S. Rep. 98-160, 98th Cong., 1st Sess., p. 104.

In the report accompanying the Fiscal Year 1985 appropriations bill this committee again expressed concern about FDA's failure to expedite the sulfite safety review. The committee noted that FDA had taken certain actions during Fiscal Year 1984 that made it appear unlikely that the agency could meet the deadline for a final rule established by the committee. S. Rep. 98-566, 98th Cong., 2d Sess., p. 123.

Last year, concerned about continued foot-dragging by FDA, the House of Representatives agreed to a Senate amendment to the FDA Fiscal Year 1986 appropriations bill that requires FDA to complete the safety evaluation of sulfites by June 1, 1986. P.L. 99-190, Section 101(a), referencing H. Conf. Rep. 99-439, Amendment No. 81, 99th Cong., 1st Sess. (1985).

We are greatly concerned about the slowness with which FDA has responded to the grave hazards posed by the use of sulfites in the food supply. Originally, this committee expected a final rule to be published by the end of 1985. Today, the best that can be hoped for is that FDA will publish a proposed rule by June 1, 1986. Given FDA's poor track record, we have grave doubts about whether FDA will meet Congress' deadline.

To be fair, FDA has issued one proposed rule that addresses part of the sulfite problem. In August, 1985, in response to a mounting death toll and intense pressure from Congress, FDA proposed to ban sulfites from fresh fruits and vegetables. 50 Fed. Reg. 32,830 (August, 14, 1985). That proposal is only a first step. Many other uses of sulfites are capable of causing death and life-threatening reactions. Yet, FDA has failed to take any action that would restrict any other uses of sulfites.

Two recent sulfite deaths demonstrate the need for immediate and stronger action than FDA is contemplating. The deaths were caused by sulfite-treated hash brown potatoes and white wine, uses that are unaffected by FDA's proposal.1/ Given the fact that there are several sulfite-free processed potato products (Ore Ida Tater Tots, Hash Browns, and Golden Patties) and at least one wine (Walthari) that contains no added sulfites, there appear to be no practical reason why a ban on the addition of sulfites to these foods cannot be ordered.

Furthermore, by FDA's own account, less than half of the consumer complaints filed with the agency since 1982 concerned fresh fruits and vegetables. Nearly 30 percent of the cases involved wine, beer, or processed food eaten at home, uses that are unaffected by the proposal to ban sulfites from fresh fruits and vegetables. 50 Fed. Reg. 32,832.

We also note that FDA's proposal fails to address concerns raised by the Federation of American Societies for Experimental Biology (FASEB), which reported on the hazards of sulfites in 1985. FASEB found that the following foods contained "high" levels of sulfites -- wine, shrimp, "instant" potatoes, dried apricots, and "tossed salad."2/ With the exception of tossed salad, none of the foods identified by FASEB as containing high levels of sulfites would be affected by the proposal.

Even a spokesman for the food industry has acknowledged that the majority of the uses of sulfites will continue unabated. Richard E. Cristol, deputy director of the Food Additive Council, stated that the proposed ban on fresh fruits and vegetables "would have very little economic effect...Most of the volume [of sulfites] goes in processed food, such as dried fruit and frozen potato products."3/

We urge Congress to maintain its vigilant watch over FDA. Given FDA's poor track record on sulfites we fear that, without continued prodding from Congress, FDA will fail to respond in a meaningful way to the hazards posed by sulfites.

## 2. *Fast Food Ingredient Labeling*

The Federal Food, Drug, and Cosmetic Act requires that all foods regulated by FDA that are sold in wrappers or containers bear ingredient statements on product labels. 21 U.S.C. § 343(i). Similar requirements are contained in the Federal Meat Inspection Act, 21 U.S.C. § 601(n)(9) and the Poultry Products Inspection Act, 21 U.S.C. § 453(h)(9) for meat and poultry products regulated by the U.S. Depar[illegible]ent of Agriculture (USDA).

With the advent of nationwide chains of franchised fast food restaurants in the 1950s and 1960s, the manner in which much restaurant food is prepared and served has drastically changed. Each of the thousands of fast food establishments is now akin to a small, decentralized food manufacturing facility. The composition of the products is highly standardized; the variety of foods is limited; and most, if not all, foods are served in wrappers that could easily accommodate ingredient information.

In 1979, FDA and USDA concluded that their statutes' mandatory ingredient labeling provisions extend to fast foods that are sold in wrappers or containers. *Food Labeling Background Papers*, p. 13 (1979). However, the agencies decided not to enforce those laws for any restaurant food, though they indicated that they would reexamine this policy in the future if needed. 44 *Fed. Reg.* 76,000 (1979)

Today, with Americans spending nearly $50 billion a year in fast food restaurants, fast foods provide a significant portion of the diets of millions of people. A variety of health problems associated with the ingredients in fast foods makes the disclosure of those ingredients imperative. Hundreds of thousands of Americans are allergic to fast food ingredients such as FD&C Yellow Dye No. 5 and corn-based sweeteners. Many others need to avoid certain ingredients, such as animal fats, and coconut and palm oils, to reduce their risk of heart attack and other diet-related diseases. Ingredient disclosure is the only device that can enable these consumers to safely eat fast foods.

FDA and USDA publicly acknowledged the importance of label disclosure of restaurant ingredients to persons who are allergic to ingredients. In the *Food Labeling Background Papers*, the agencies stated:

> Sufferers of allergies and persons following special diets would benefit from ingredient labeling of restaurant foods ... while the actual impact upon health is rather uncertain, the number of people who may more easily be able to deal with their health problems may be significant.

FLBP, p. 13.

More recently, FDA wrote the Bureau of Alcohol, Tobacco and Firearms (BATF) and urged BATF to require the disclosure of alcoholic beverage ingredients. FDA stated:

> Once sensitivity to ingested substances has been confirmed, however, the most effective way of dealing with the problem is to avoid those substances. *Because many ingredients may be concealed in prepared products, reliance on ingredient declaration may be the only practicable means for consumers to avoid offending substances.*

Memorandum from Joseph P. Hile, FDA Associate Commissioner for Regulatory Affairs, to BATF, July 20, 1983 (emphasis added).

Furthermore, the principle of mandatory ingredient labeling has widespread public support. The Heritage foundation, a conservative think-tank, in its book Mandate For Leadership II, states:

> The mandatory disclosure of certain information may also prove an effective means of achieving regulatory goals. Requiring food processors to disclose the use of certain additives, for example, allows consumers to make a more intelligent choice...

Mandate For Leadership II, The Heritage Foundation (1984), p. 421.

For these reasons, and in particular because of the great concern the public now has over sensitivity to food ingredients and diet-related diseases, CSPI petitioned FDA and USDA last June and urged the agencies to abandon their historical indifference to restaurant ingredient labeling and enforce the labeling provisions of their respective statutes for fast foods served in packaged form. See Attachment 1. Co-petitioners and endorsers included the New York State Consumer Protection Board, the American College of Allergists, and the American Dietetic Association. In addition, thousands of consumers and over 100 health experts have expressed their support for ingredient disclosure to the government. USDA denied the petition in December, 1985. FDA has not yet responded to the petition.

Several members of Congress have expressed concern over the government's failure to enforce this vital provision of federal law. Following the tragic death of a young woman with an allergy to peanuts, who died after she unknowingly consumed peanut butter that was added to a restaurant's chili, Senator John Chafee indicated that ingredient information should be available to restaurant patrons. Congressional Record, March 27, 1986, p. S3756. In addition, after USDA denied the petition, Congressman Stephen Solarz wrote then-Secretary Block and stated that he was "troubled by USDA's denial of the petition." See Attachment 2.

We urge this committee to require FDA to issue a report to the committee within the next several months on the status of the petition. The committee should also express its concern over FDA's and USDA's failure to enforce their statutes' mandatory ingredient disclosure requirements.

### 3. Neurotoxicity Testing

FDA's mandate to protect the public from unsafe medicines and food products must surely include the responsibility to prevent harm from substances that impair the nervous system and thus disrupt mental function and behavior. Yet the agency to date has made no provisions for screening the chemicals under its jurisdiction to detect any that might cause memory loss, learning disabilities, emotional instability, abnormal activity, coordination problems, or other symptoms of toxicity to the nervous system -- otherwise known as neurotoxicity.

The National Academy of Sciences recognized this gap in FDA policy in a 1984 report called Toxicity Testing. In its conclusions, the Academy recommended that neurotoxicity testing be made a top priority for all medications and food additives, as well as for other classes of chemicals. See Attachment 3. The Academy also provided instructions for conducting appropriate neurotoxicity tests in laboratory animals -- instructions that the EPA's Office of Toxic Substances has translated into a detailed set of guidelines for manufacturers to follow. See Attachment 4.

FDA should adopt similar guidelines for testing the safety of medications and food additives. We are particularly concerned that nothing is being done to detect substances that might interfere with brain development in children exposed before birth or during infancy. Some drugs -- most notably Dilantin -- are already known to cause permanent mental retardation in the offspring of women who take the products during pregnancy. FDA is repeating the mistakes it made in handling the sulfite problem by waiting until victims are irreparably harmed before it takes action against neurotoxic substances. It is time for FDA to implement the National Academy of Sciences' recommendations and require all food additives and drugs to be tested for neurotoxic properties before they are allowed on the market.

We urge the committee to express its concern over FDA's failure to implement the NAS recommendations. The committee should also require FDA to issue a report to the committee within the next several months on the status of the agency's response to the NAS report.

We thank the committee for this opportunity to testify and would be pleased to answer any questions.

NOTES

1. "2 More Deaths Linked to Sulfite in Food Are Under Scrutiny," The New York Times, September 5, 1985, p. 18.

2. Select Committee on GRAS Substances, "The Reexamination of the GRAS Status of Sulfiting Agents," Life Sciences Research Office, Federation of American Societies for Experimental Biology, January 28, 1985, p. 29. See 50 Fed. Reg. 32,832. These items are by no means the only foods that contain high levels of sulfites. FASEB only used them as examples of foods with high residual levels of sulfites.

3. "U.S. Moves to Ban 6 Preservatives From Fresh Fruits and Vegetables," The New York Times, August 10, 1985, p. 8 [emphasis added].

[ATTACHMENT 1]

# PETITION FOR A STATEMENT OF ENFORCEMENT POLICY REQUIRING THE DISCLOSURE OF INGREDIENTS ON "FAST FOOD" LABELS

## CITIZEN PETITION

The undersigned submit this petition under Sections 201(k), 201(m), 201(n), 403(a), 403(i), 403(k) of the Food, Drug and Cosmetic Act, 21 U.S.C. § 321 *et seq.*; Section 4(d) of the Administrative Procedure Act, 5 U.S.C. § 553(e); and Section 10.30 of Title 21 of the Code of Federal Regulations. Petitioners request the Commissioner of the Food and Drug Administration (FDA) to require all foods served in a container or wrapper by "fast food"[1] restaurants to disclose their ingredients pursuant to Section 403(i) of the Food, Drug and Cosmetic Act. All such foods failing to disclose ingredients should be deemed in violation of the Food, Drug and Cosmetic Act's prohibition against misbranded food labels.

## INTRODUCTION

The Food, Drug and Cosmetic Act (FD&C Act) requires the disclosure of ingredients on the labels of all non-standardized foods. 21 U.S.C. § 343(i). The Food and Drug Administration (FDA) has historically chosen not to enforce this provision of the Act against foods served in restaurants, because ingredients could change on an almost daily basis, and no "label," as defined by the FD&C Act, existed for most restaurant foods. 44 *Fed. Reg.* 76,000 (1979).

With the advent of nationwide chains of franchised fast food restaurants in the 1950s and 1960s, the manner in which much restaurant food is prepared and served has drastically changed. Each of the thousands of fast food establishments is now akin to a small, decentralized food manufacturing facility. The composition of the products is highly standardized; the variety of foods is limited; and most, if not all, foods are served in wrappers that could easily accommodate ingredient information.

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[1] For purposes of this petition, a "fast food" restaurant is defined as any outlet of a restaurant chain with more than ten franchises that serves foods in a packaged form that satisfies the Food Drug and Cosmetic Act's definition of a "label". 21 U.S.C. § 201(k).

FDA has acknowledged this change in the restaurant industry. The agency, in cooperation with the Department of Agriculture and the Federal Trade Commission, undertook a systematic examination of food labeling issues in the late 1970s. That study specifically addressed the ingredient labeling of restaurant food and stated that:

> in the growing number of fast food restaurants, food is generally served in individually-wrapped portions, such as foil-encompassed sandwiches, potatoes in bags, and pies in boxes. In these circumstances, the application of labels, and therefore the requirement of ingredient listing, is a realistic possibility.

Food Labeling Background Papers (FLBP), U.S. Departments of Health, Education, and Welfare, Agriculture, and Federal Trade Commission (1979), p. 13 (emphasis added).

Today, with Americans spending $40 billion a year in fast food restaurants, fast foods provide a significant portion of the diets of millions of people.[2/] A variety of health problems associated with the ingredients in fast foods makes the disclosure of those ingredients imperative. Hundreds of thousands of Americans are allergic to fast food ingredients such as FD&C Yellow Dye No. 5 and corn-based sweeteners. Many others need to avoid certain ingredients, such as animal fats, and coconut and palm oils, to reduce their risk of heart attack and other diet-related diseases. Ingredient disclosure is the only device that can enable these consumers to safely eat fast foods. Aside from these pressing health concerns, consumers need to know ingredient information in order to avoid economic deception.

In 1979 FDA stated that, while it would not then require the declaration of restaurant food ingredients, it stood ready to

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[2/] This figure was provided by Alden Manchester, Senior Economist, National Economics Division, Economic Research Service, U.S. Department of Agriculture.

reexamine its policy in the future if needed. 44 Fed. Reg. 76,000. For the reasons stated above, and in particular because of the great concern the public now has over sensitivity to food ingredients and diet-related diseases, we petition FDA to abandon its historical indifference to restaurant ingredient labeling and enforce the labeling provisions of the FD&C Act for fast foods served in packaged form.

## STATEMENT OF FACTUAL GROUNDS

### I. Ingredient Labeling Of Fast Foods Is Warranted For Compelling Health Reasons

#### A. Consumers who are allergic to specific ingredients rely on ingredient disclosure to avoid products that cause adverse reactions.

Sixty-six million adults believe they have suffered adverse reactions to food. National Consumer Panel of the Market Research Corporation of America (1977). According to the National Institute for Allergy and Infectious Diseases (NIAID), "[a]voidance of specific food allergens is the treatment of choice for food allergy.... Perhaps most important for the highly sensitive patient is the practice of reading food labels." Adverse Reactions to Food, NIAID Report, July, 1984, p. 161. Yet, for the millions of American who are most likely allergic to the ingredients contained in fast foods, avoidance is impossible because fast food labels do not bear ingredient information.

FDA has publicly acknowledged the importance of label disclosure of restaurant ingredients to persons who are allergic to ingredients. In the Food Labeling Background Papers, FDA stated:

> Sufferers of allergies and persons following special diets would benefit from ingredient labeling of restaurant foods... while the actual impact upon health is rather uncertain, the number of people who may more easily be able to deal with their health problems may be significant.

FLBP, p. 13.

More recently, FDA wrote the Bureau of Alcohol, Tobacco and Firearms (BATF) and urged BATF to require the disclosure of alcoholic beverage ingredients. FDA stated:

> Once sensitivity to ingested substances has been confirmed, however, the most effective way of dealing with the problem is to avoid those substances. Because many ingredients may be concealed in prepared products, reliance on ingredient declaration may be the only practicable means for consumers to avoid offending substances.

Memorandum from Joseph P. Hile, FDA Associate Commissioner for Regulatory Affairs, to BATF, July 20, 1983 (emphasis added).

Fast foods served in packaged form contain many of the known allergens found in other food products. For instance, FD&C Yellow Dye No. 5 is used as a color additive in several products. This additive has a clearly identifiable population of sensitive individuals who can only avoid the dye by reading food labels. In fact, FDA requires the specific label disclosure of Yellow Dye No. 5 to alert consumers who are allergic to this additive. 21 CFR § 74.705(d). In its memorandum to BATF, cited earlier, FDA specifically mentioned the need to disclose Yellow Dye No. 5. It said, "that there is enough reason for concern about possible adverse reactions to FD&C Yellow No. 5 to require its specific identification on the labels of all foods in which it is used." Supra.

Other ingredients used in fast foods that cause allergic reactions include:

* Corn-based Sweeteners - Many of the soft drinks, dessert items, and sauces served in fast-food establishments contain corn-based sweeteners that can trigger allergic reactions in the thousands of Americans who are sensitive to corn and corn derivatives. One expert maintains that corn is the most significant food allergen. Randolph, T.G., Food Allergy, Med. Clin. North Am. 1948; 32:245-263.

* Milk Solids - The dessert items and shakes so popular in fast-food establishments contain milk solids. Since it is possible for some of these products to be composed entirely of non-milk ingredients it is essential that the ingredients of

these products be disclosed so that allergic consumers can purchase products that do not contain milk.

Other examples of allergens contained in products that may be sold by fast-food restaurants include sulfiting agents used to preserve salad ingredients and processed potatoes. At least 500,000 persons are allergic to sulfiting agents and risk suffering life-threatening reactions. Other examples include eggs, wheat, and peanuts.

B. Ingredient labeling is needed to aid persons who must avoid certain ingredients linked to diet-related diseases.

A variety of health problems, in addition to allergies, are linked to many ingredients used in fast foods. In some cases, the federal government has urged some or all Americans to avoid or moderate their intake of these substances.[3/] Yet, without full disclosure of these ingredients on fast food labels, consumers have no means of avoiding these ingredients when consuming fast foods. The following ingredients are representative of this category:

* Fats - A diet high in saturated fat promotes atherosclerosis, which increases the risks of heart attack and stroke. These diseases claim the lives of more than 700,000 Americans each year -- considerably more than any other major illness. The Departments of Agriculture and Health and Human Services, along with the American Heart Association and other medical authorities, have urged the general public to moderate their intake of saturated fats. Persons seeking to follow this potentially life-saving advice would clearly be aided by labels that disclose the specific type of fat used to prepare individual fast food items.

Various types of fats are found in fast foods. Many people may mistakenly assume that fast foods are fried in polyunsaturated oil because home-cooked fried foods are usually prepared in that manner. However, many fast food establishments

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[3/] Dietary Guidelines for Americans, U.S. Departments of Agriculture, and Health and Human Services (1980).

prepare food by using lard, beef tallow, or other highly saturated fats. Current FDA regulations require each individual fat type -- be it animal, vegetable or marine; hydrogenated or partially hydrogenated -- to be disclosed on food labels. 21 C.F.R. § 101.4(b)(14). This regulation needs to be enforced for fast food products so that consumers can avoid foods that are prepared with highly saturated fats.

* Saccharin - Diet soft drinks offered for sale in fast food restaurants may be sweetened in whole, or in part, with saccharin, a known animal carcinogen. Consumers who are concerned about the health risks of saccharin must be able to identify products that do, and do not, contain this sweetener. The FD&C Act currently requires a warning notice on the label of all saccharin-sweetened foods. 21 U.S.C. § 343(o). While restaurants are exempted from the saccharin warning notice by FDA, the exemption should not apply to fast food establishments where foods are served in packaged form and can be easily labeled.

* Aspartame - Phenylketonurics must avoid the amino acid phenylalanine, which is found in all foods that contain the sweetener aspartame. In fact, FDA requires the labels of all foods sweetened with aspartame to contain the warning statement "Phenylketonurics: Contains Phenylalanine." 21 CFR § 172.804(e). Nevertheless, diet soft drinks served by fast food restaurants in sealed paper or plastic cups do not disclose this information. Other individuals have reported extreme sensitivities to aspartame and need to know which products contain the sweetener in order to avoid it.

* Color Additives - Numerous artificial coloring agents are added to fast foods, such as milk shakes, ice cream, pastries, and soft drinks. There are varying amounts of evidence that several of the dyes, including Red No. 3, Blue No. 2, Green No. 3, and Yellow No.6, increase the risk of cancer. FDA has recently recommended that action be taken against Red No. 3 because of its potential carcinogenicity. It is essential that

the simple label declaration noting the presence of artificial coloring be extended to fast food products.

* BHA and BHT - These preservatives, known chemically as butylated hydroxyanisole and butylated hydroxytoluene, are used as antioxidants in many foods containing fats or oils. Some studies suggest that they promote cancer, and further research is being conducted. In the meantime, consumers who want to avoid these chemicals must know which products do and do not contain them.

* MSG - Monosodium glutamate (MSG) is added to meat-based fast foods. In sensitive individuals, MSG causes headaches, muscle tightness, and tiredness, symptoms that have been dubbed "Chinese Restaurant Syndrome." Many restaurant patrons who have experienced this uncomfortable ailment seek to avoid MSG-containing fast foods.

The health considerations just described provide compelling grounds for the issuance of an enforcement policy to require ingredient labeling on fast foods.

## II. The Failure to Disclose Fast Food Ingredients Constitutes Economic Deception to Consumers.

Consumers have a basic right to know the ingredients in fast foods. The failure to disclose fast food ingredients leaves consumers completely in the dark as to the composition of these products. In order to avoid being deceived by products which the public might otherwise believe to be naturally flavored, naturally colored, or additive-free, consumers must be provided with ingredients on the labels of fast-food products.

A variety of artificial ingredients is used in fast foods. For example, shakes and dessert items, which the public may believe to be composed of milk, eggs, natural flavoring, and real sugar, may contain artificial colorings, flavorings, emulsifiers and thickening agents. Without ingredient labeling, consumers have no way of knowing the actual composition of these products.

FDA has long believed that ingredient disclosure is a basic consumer protection device. FDA has stated that ingredient labeling

> facilitate[s] 'value comparisons,' the basis of FDA's ingredient declaration requirements for cosmetics under the Fair Packaging and Labeling Act (21 CFR 701.3). Indeed, it has been the agency's experience that...most [consumers] want enough information to be able to make value comparisons, even if only to favor certain ingredients or avoid others.

Memorandum to BATF, supra., p. 1.

Furthermore, the principle of mandatory ingredient labeling has widespread public support. The Heritage Foundation, a conservative think-tank, in its book Mandate For Leadership II, states:

> The mandatory disclosure of certain information may also prove an effective means of achieving regulatory goals. Requiring food processors to disclose the use of certain additives, for example, allows consumers to make a more intelligent choice...

Mandate For Leadership II, The Heritage Foundation (1984), p. 421.

To prevent this economic deception from being perpetuated, FDA should issue a statement of enforcement policy that requires fast food ingredients to be disclosed on product labels.

## STATEMENT OF LEGAL CROUNDS

### III. FDA Has Jurisdiction Over The Labeling Of Restaurant Food

Any doubt over whether FDA has jurisdiction over fast food labels was resolved when FDA stated in the Food Labeling Background Papers that "present legal authority would be adequate to extend ingredient labeling to those restaurant foods that come in 'containers' or that have 'wrappers'." FLBP, p. 14.

FDA clearly has the power to take action against fast food products that are misbranded, as long as they have entered interstate commerce or are held for sale after shipment in interstate commerce. See 21 U.S.C. § 301(a)-(c), (k).

Fast foods that are served in packaged form satisfy the

FD&C Act's definition of what constitutes a "label." The wrappers or containers in which fast foods are served invariably contain "a display of written, printed, or graphic matter upon the immediate container" of the fast food item. 21 U.S.C. § 321(k). The definitional section of the statute goes on to say that any information required to appear on a label must appear on the outside container or wrapper of the retail package. Id.

FDA stated in 1979 that the primary authority over restaurants resided with state and local governments. 44 Fed. Reg. 76,000 (1979). Even if these other governmental entities have the necessary personnel to inspect restaurants, the fact remains that many fast food restaurants are part of large regional or national chains. To insure uniform ingredient disclosure, they must be regulated by the federal government, rather than on a piecemeal state-by-state basis.

Furthermore, in the six years since FDA stated that the responsibility for insuring the disclosure of this vital health information falls to state and local governments, not one of these governmental bodies, to our knowledge, has used its authority to require ingredient disclosure.

The absence of ingredient information from the labels of fast food products represents a crystal clear violation of the FD&C Act. FDA has the jurisdiction to issue a statement of enforcement policy requiring the label disclosure of fast food ingredients. The disclosure of this information is an important enough public health matter to justify the active enforcement of the agency's labeling authority over fast food restaurants.

## IV. Fast Foods Sold In Packaged Form That Fail To Disclose Their Ingredients Are Misbranded Under The Food, Drug And Cosmetic Act.

### A. The Failure to Disclose Ingredients Violates the FD&C Act's Mandatory Ingredient Labeling Provision.

Non-standardized foods, such as the products sold in fast-food restaurants, are required by the FD&C Act to disclose their ingredients on the product label. Section 403(i) clearly states that the failure to list ingredients renders the product misbranded.[4/] Since the wrappers or containers that fast foods are served in satisfy the FD&C Act's definition of a label, any fast food label that does not bear ingredient information is misbranded.[5/]

"[M]isbranding was one of the chief evils Congress sought to stop" when it enacted amendments to the FD&C Act that, inter alia, required mandatory ingredient labeling. 62 Cases of Jam v. United States, 340 U.S. 593, 596 (1951). The Act is a remedial statute designed "to protect consumers who under present conditions are largely unable to protect themselves in this field." Kordel v. United States, 335 U.S. 345, 349 (1948). Mandatory ingredient labeling is one device created by the FD&C Act that enables consumers "to protect themselves" by providing vital information at the point of purchase so that consumers can avoid particular products whose ingredients may adversely affect their health. See also, United States v. Aangamik 15 Calcium Pangamate, 503 F. Supp. 925 (N.D. Il. 1980), aff'd, 678 F.2d 735 (7th Cir. 1982); United States v. Kocmond, 220 F.2d 370, 373 (7th Cir. 1952) ("the statutory requirement is that at the time the merchandise reaches the ultimate consumer it shall be so labeled as to indicate its true contents.")

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[4/] The statute states that "[a] food shall be deemed to be misbranded -

(i) If it is not subject to the provisions of subsection (g) of this section unless its label bears...(2) in case it is fabricated from two or more ingredients, the common or usual name of each such ingredient." 21 U.S.C. § 343(i).

[5/] Processed packaged foods sold in supermarkets or grocery stores are similar to fast foods to the extent that both are required to disclose non-standardized ingredients on product labels. However, in a supermarket, consumers can review the ingredients of processed packaged foods prior to making a purchase and thereby avoid foods that contain ingredients tney choose not to consume. Most fast food establishments are not designed to allow consumers to examine product containers prior to purchase. This reduces the utility of an ingredient statement were it only to appear on a product label. Therefore, FDA should encourage the fast food industry to voluntarily display an ingredient list of all products either on wall posters, table placards, or via some other equally effective way. This will put the fast food consumer on an equal footing with the consumer in a supermarket who can peruse an ingredient list prior to making a purchase.

The legislative history of the FD&C Act demonstrates that Congress viewed mandatory ingredient labeling as a device to aid consumers who are allergic to food ingredients. In 1935, the Senate passed S. 5, the forerunner of the FD&C Act enacted by Congress in 1938. In the report accompaning S. 5, the Senate stated that mandatory ingredient labeling:

> has a distinct public-health significance. A surprisingly large proportion of our people are made ill - some violently so - by common ingredients in food which most people consume with impunity. That large group of unfortunates can protect themselves from the consumption of foods to which they are allergic by the information made available to them under...this section.

S. Rep. 361, 74th Cong., 1st Sess., p. 12 (1935).

Furthermore, Section 403(k) of the FD&C Act specifically requires food labels to disclose artificial flavors and colors, and chemical preservatives. Fast food products contain a wide variety of additives, yet fail to disclose their presence on product labels. Given the great concern over the possible adverse health effects of additives, especially to allergic consumers, this violation of the FD&C Act's misbranding provision is of particular concern. See, United States v. An Article of Food, 550 F. Supp. 15 (W.D. Ok. 1982) (a food label that failed to disclose chemical preservatives, in view of increasing concern about chemical additives in food, may reduce value of article; consumer can only get information needed to make informed choice from product labels required by the Act.)[6/]

### B. The Failure To Disclose Ingredients On Fast Food Labels Is Misleading.

Fast food products that fail to disclose ingredient information also violate the FD&C Act's prohibition against misleading labeling. Any food label that fails to reveal mate-

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[6/] The FD&C Act does provide for exemptions from the ingredient labeling requirements of Sections 403(i) and (k) to be granted through the promulgation of regulations. See 21 C.F.R. § 101.100. However, no specific exemption has ever been granted for the labels of fast food products.

rial facts about the consequences of the use of a product is misbranded. 21 U.S.C. § 321(n).

Fast food labels that do not bear ingredient information are misleading because consumers have no way to distinguish between low quality products that contain artificial additives and products that are additive-free. A "vanilla shake", for example, may contain natural vanilla flavoring and real milk, or it may contain artificial vanilla flavoring and a non-dairy milk substitute. Thus, the consequences that follow from the failure of fast food products to bear ingredient information is that a consumer may unknowingly purchase a product that contains inferior or undesirable ingredients.

The label disclosure of ingredient information is vital to an informed purchasing decision. The omission of such information renders such fast food labels misbranded. See Cosmetic, Toiletry and Fragrance Association v. Schmidt, 409 F. Supp. 57 (D.D.C. 1976), aff'd without opinion, No. 75-1715 (D.C. Cir. Aug. 19, 1977); Council for Responsible Nutrition v. Goyan, C.A. No. 80-1124 (D.D.C. August 1, 1980); Pharmaceutical Manufacturers Association v. FDA, 484 F. Supp. 1179 (D. Del. 1980), aff'd, 634 F.2d 106 (3rd Cir. 1980).

In order to correct the consumer deception from unlabeled fast food products, we urge FDA to require that the ingredients of such products be disclosed.

## V. Conclusion

For the foregoing reasons, Petitioners urge the Commissioner of the Food and Drug Administration to issue a statement of enforcement policy to require the disclosure of "fast food" ingredients on product labels.

## ENVIRONMENTAL IMPACT

The action requested in this petition has no significant environmental impact.

## CERTIFICATION

The undersigned certify, that, to the best knowledge and belief of the undersigned, this petition includes all information and views on which the petition relies, and that it includes representative data and information known to the petitioner which are unfavorable to the petition.

Respectfully submitted,

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[ATTACHMENT 2]

## Letter From Hon. Stephen J. Solarz, U.S. Representative From New York

The Honorable John Block
Secretary, U.S. Department of Agriculture
Washington, D.C. 20250

February 7, 1986

Dear Secretary Block:

I am writing to express my interest in ingredient labeling of fast foods. I understand that on December 3, 1985, USDA rejected a petition filed by the Center for Science in the Public Interest, the New York State Consumer Protection Board, and the American College of Allergists, urging USDA to enforce its madatory ingredient disclosure laws for foods sold in fast food restaurants.

I am particularly interested in the reasons offered by USDA for rejecting the petition. I would greatly appreciate your prompt response to the following questions:

(1) What are the "regulation reform policies" with which the petition was deemed to be "incompatible"?

(2) Does the Department have any actual cost data to support the conclusion that labeling costs "would be substantial"?

(3) Do the Federal Meat and Federal Poultry Products Inspection Acts require that "compelling public benefits" must be proven to outweigh the cost of a proposal in order for regulatory action to be taken?

(4) Does USDA still agree with its 1979 interpretation that "present legal authority would be adequate to extend ingredient labeling to those restaurant foods that come in 'containers or wrappers'"?

I am troubled by USDA's denial of the petition. Not only does fast food ingredient labeling make eminent good sense from a public health standpoint, but it appears to be required by the very statutes Congress has entrusted the Department to enforce.

I look forward to your responses to my inquiry. Please direct these to my Legislative Assistant, Alex Wohl.

Sincerely,

STEPHEN J. SOLARZ
Member of Congress

## [ATTACHMENT 3]

## TOXICITY TESTING—STRATEGIES TO DETERMINE NEEDS AND PRIORITIES

TABLE 19 Relative Comparison of Testing Need by Intended-Use Category of Select Universe[a]

| Category and Subsample Size | | | |
|---|---|---|---|
| Pesticides and Inert Ingredients of Pesticide Formulations (15) | Cosmetic Ingredients (15) | Drugs and Excipients in Drug Formulations (15) | Food Additives (15) |
| Neurobehavioral toxicity<br>Teratology--rodent, rabbit<br>Genetic toxicity | Neurobehavioral toxicity<br>Subchronic eye toxicity | Acute inhalation toxicity<br>Skin sensitization--guinea pig<br>Subchronic dermal toxicity: 90-d<br>Subchronic inhalation toxicity: 14- or 28-d<br>Subchronic inhalation toxicity: 90-d<br>Multigeneration reproduction--rodent<br>Carcinogenicity--rodent<br>Genetic toxicity<br>Subchronic eye toxicity<br>Segment I: fertility and reproductive performance<br>Acute delayed neurotoxicity<br>Skin painting--chronic<br>Implantation | Acute inhalation toxicity--nonrodent<br>Subchronic oral toxicity--nonrodent: 90-d study<br>Subchronic oral toxicity--nonrodent: 6- to 12-mo study<br>Neurobehavioral toxicity<br>Multigeneration reproduction--rodent<br>Combined chronic toxicity-carcinogenicity--rodent<br>Genetic toxicity |
| Subchronic inhalation toxicity: 14- or 28-d<br>Multigeneration reproduction--rodent<br>Carcinogenicity--rodent<br>Combined chronic toxicity-carcinogenicity--rodent<br>Acute delayed neurotoxicity | Subchronic dermal toxicity: 90-d<br>Skin painting--chronic<br>Skin penetration<br>Skin sensitization--guinea pig<br>Subchronic dermal toxicity: 21- or 28-d<br>Genetic toxicity | Acute dermal toxicity<br>Subchronic toxicity nonrodent: 14- or 28-d<br>Subchronic oral toxicity--nonrodent: 90-d<br>Subchronic oral toxicity--nonrodent: 6- to 12-mo<br>Neurobehavioral toxicity<br>Teratology--rodent, rabbit<br>Chronic toxicity<br>Combined chronic toxicity-carcinogenicity--rodent<br>Segment III: perinatal and postnatal performance | Subchronic oral toxicity--rodent: 90-d study<br>Teratology--rodent, rabbit<br>Carcinogenicity--rodent |
| Subchronic dermal toxicity: 21- or 28-d | Human sensitization | Acute oral toxicity--nonrodent<br>Acute dermal irritation--corrosivity<br>Acute eye irritation--corrosivity<br>Subchronic oral toxicity--rodent: 90-d<br>Human sensitization<br>Acute oral toxicity--rodent<br>Acute parenteral toxicity<br>Subchronic oral toxicity--rodent: 14- or 28-d | Subchronic oral toxicity--rodent: 14- or 28-d<br>Toxicokinetics |
| Skin sensitization--guinea pig<br>Toxicokinetics<br>Chronic toxicity | Acute eye irritation--corrosivity<br>Carcinogenicity--rodent<br>Acute dermal toxicity<br>Acute dermal irritation--corrosivity | | Acute oral toxicity--rodent |
| Acute inhalation toxicity | | | |
| Acute eye irritation--corrosivity<br>Subchronic oral toxicity--rodent: 90-d | | | |
| Subchronic oral toxicity--nonrodent: 90-d | | | |
| Acute dermal toxicity | | | |

## APPENDIX I

### REFERENCE PROTOCOL GUIDELINES FOR NEUROBEHAVIORAL-TOXICITY TESTS

Neurobehavioral-toxicity testing requires both morphologic and behavioral assessment. With current methods, the effects of some chemicals are most reliably detected by measuring morphologic changes, whereas other chemicals produce behavioral changes without, as yet, the identification of any morphologic basis. Because methods for neurobehavioral-toxicity testing are still being developed and validated, a high degree of standardization in such testing is inappropriate at this time. Nevertheless, a scheme proposed by a committee of the National Research Council (1977) gave specific and detailed suggestions of protocols for neurobehavioral-toxicity testing. The scheme, presented here, is a reasonable starting point for neurobehavioral-toxicity testing, and the suggested protocols were used as the reference protocol guideline in this study.

The 1977 committee recommended that both conditioned and unconditioned behaviors be studied. For unconditioned behavior, it suggested that circadian patterns of spontaneous motor activity (SMA)* be measured. SMA in rodents has been widely studied to document behavioral changes produced by chemicals.

This procedure does not require any special training of personnel. For conditioned behavior, it suggested that performance maintained by schedules of food presentation be used as a measure. Some types of schedule-controlled responding** require little training of the animal, but provide an estimate of the effects of a substance on fairly complex behavioral processes. Reiter et al. (1981) have found that measurements of SMA and schedule-controlled behavior are two of the most sensitive tests for determining the behavioral effects of pesticides. A battery of sophisticated techniques for more detailed evaluation of substances for neurobehavioral effects is gradually being developed (Geller et al., 1979).

Measurement of morphologic changes in the nervous system requires in situ perfusion of the animal and the use of contemporary methods of nervous system preparation for examination by light microscopy and perhaps electron microscopy. Spencer et al. (1980) have developed procedures for tissue preparation based on glutaraldehyde fixation that permit classification of neurotoxins according to their target sites (e.g., soma and myelin). Their system permits assessment of the location, type, and degree of neurotoxic damage. For the neurotoxins studied thus far, there is a good correlation between the type of neurotoxic damage observed in animal models and the type of neurotoxic damage produced by the same substances in humans.

In addition to the behavioral and morphologic testing recommended for the screening of neurotoxins, a host of other approaches to neurotoxicity testing are under development. Among these are tests involving tissue cultures, electrophysiology, and neurochemistry. The current stage of development of some of these approaches has been outlined briefly by Spencer et al. (1980).

## PRINCIPLES AND DESCRIPTION OF TESTING FOR NEUROBEHAVIORAL EFFECTS

Many substances damage the nervous system (Spencer and Schaumburg, 1980) and thereby produce a variety of behavioral changes. Although no substance or series of substances can now be recommended as a reference for neurotoxicity testing, positive controls are always desirable. Agents with established neurobehavioral toxicity should be tested repeatedly to establish the sensitivity of the measurement system when new substances with potential neurobehavioral toxicity are under investigation.

A range of doses of a substance should be administered for acute-toxicity testing of neurobehavioral effects, including doses large enough to produce obvious effects. Fractions of the $LD_{50}$ should be used, and the substances should be administered by the route of likely human exposure. Effects of the substances on SMA and schedule-controlled behavior should then be determined. Later, the animals should be sacrificed for histologic examination by light microscopy and possibly electron microscopy. For subchronic studies, three doses, including the highest dose that did not affect behavior or produce morphologic changes on acute administration, should be administered repeatedly.

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* Spontaneous motor activity (SMA) is a measurement of an animal's body movement under a given set of environmental conditions. SMA may be detected by a variety of techniques, including photocell-beam interruption and changes in a capacitance field. It is important that measurements be objective and unbiased. Use of automatic instrumentation is recommended for the measurement of SMA.

** Schedule-controlled responding is maintained by reinforcement. For example, animals are trained to make specific responses to specific stimuli to obtain food or water or to avoid shock. The relationship of the response to delivery of such reinforcers is called the schedule of reinforcement, and the behavior may be referred to as schedule-controlled responding (Ferster and Skinner, 1957).

Healthy adult animals should be randomly assigned to treatment and control groups. In some instances, behavior is exceedingly stable, and pre-exposure behavior provides control observations for the exposure period. Rats are the preferred animal, although mice are also appropriate. Standard breeds and strains should be used, and at least six animals should be studied at each dose.

SMA must be measured under carefully controlled conditions (National Research Council, 1977). For example, strain of animal, feeding and watering schedules, time of day of testing, and conditions of temperature, humidity, and lighting must be specified. The device used to measure SMA must also be described in detail, although no particular method has yet been recommended.

For measurement of schedule-controlled responding, conditions must also be specified in detail. Again, the species, body weight, feeding and watering schedules, etc., must be specified. The reinforcement schedule should be described in sufficient detail to allow others to repeat the experiment under nearly identical conditions.

A reasonable time should be allowed to elapse, after the substance is administered, for absorption and distribution before behavior is measured. Animals should be tested daily for at least 1 wk after acute administration to determine the consequences of delayed neurotoxicity, such as that observed with alkyl tin compounds. Similar principles should be followed for subchronic testing. Where possible, it is desirable to have histologic examinations and behavioral testing of the same animals.

Additional animals exposed to the substance, but not tested for behavioral effects, can be added to the design as necessary to increase group size for time-response effects. Methods similar to those described by Spencer et al. (1980) are appropriate.

Tests of statistical significance should be applied to the data. Reproductions of histologic slides can often be used to illustrate types of neurotoxicity, although tables are generally necessary to document the frequency with which the illustrated events occurred. Specificity of neurobehavioral toxicity may be expressed as the ratio of the $LD_{50}$ to the neurobehaviorally toxic dose. Neurobehavioral-toxicity evaluation and its relative importance should include a comparison with other toxicity data on the substance. For example, neurotoxic effects manifested only by a dose 10 times higher than that required for carcinogenicity would be of little regulatory interest.

The test report should include dose-effect data for behavior and morphology, a description of the location and type of neural lesions, the time course of the development of behavioral and morphologic changes, statistical treatment of the results, and an indication of the degree to which the toxicity is reversible.

Detection of either morphologic changes or behavioral changes caused by effects on the central nervous system can be considered as evidence of neurobehavioral toxicity that may be extrapolated to humans. The degree to which such extrapolation is valid is under investigation. More sophisticated understanding of specific types of behavioral toxicity would require a series of tests that is beyond the present protocol. When morphologic changes have been observed, the selection of later behavioral tests should be strongly influenced by the type, degree, and location of the morphologic changes.

## DETERMINATION OF ADEQUACY OF NEUROBEHAVIORAL-TOXICITY TESTING

Because no reference protocol guidelines for neurobehavioral-toxicity testing have been established and because much evidence of neurobehavioral toxicity exists in qualitative descriptions of the adverse effects of substances, the Committee on Toxicity Data Elements has established a series of criteria for judging the adequacy of neurobehavioral-toxicity testing, including observations of effects.

The neurobehavioral-toxicity data base (see Figure I-1) should contain studies on function (both conditioned and unconditioned behavior) and morphology (neuropathology). The committee regarded neurobehavioral-toxicity testing to be (1) adequate according to reference protocol guidelines, only if all three study types followed the procedures described here; (2) adequate, but not according to reference protocol guidelines, if all three study types were conducted adequately, but not according to the procedures described here; and (3) inadequate if at least one of the three study types was missing or was conducted inadequately. The need to repeat studies conducted inadequately depends on the amount and quality of existing neurobehavioral-toxicity information on a substance. For example, documentation of extensive neural lesions (a morphologic response) might make behavioral testing (a functional response) unnecessary for regulatory purposes, because the neuropathologic effects already constitute a hazard. These criteria allowed the committee to determine whether neurobehavioral effects were observed with adequate or inadequate procedures.

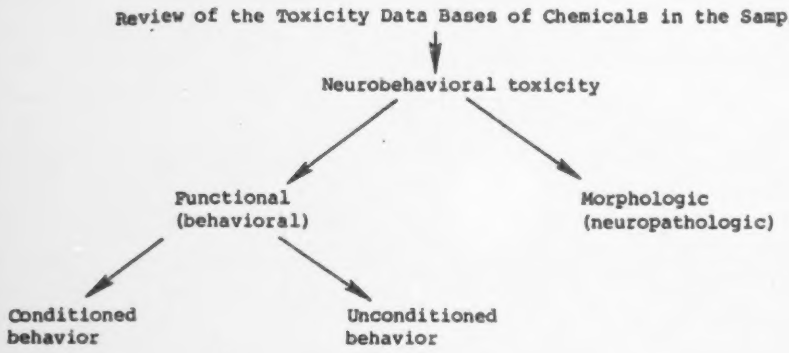
Review of the Toxicity Data Bases of Chemicals in the Sample
Neurobehavioral toxicity
Functional (behavioral)
Morphologic (neuropathologic)
Conditioned behavior
Unconditioned behavior

FIGURE I-1 Studies necessary for judging adequacy of neurobehavioral-toxicity testing.

## REFERENCES

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### [ATTACHMENT 4]

[CLERK'S NOTE.—The information referred to in this attachment was printed in Part II of the Federal Register of Friday, September 27, 1985, under the title "Toxic Substances Control Act Test Guidelines." It will not be included in the record but is available for review in the subcommittee files.]

## CONCLUSION OF HEARINGS

Senator COCHRAN. This concludes not only today's hearing but our series of hearings where we have been obtaining information and counsel and advice and instructions from members of the general public and also Members of Congress who have wanted to express themselves to the committee on various subjects.

This has been a very important part of our hearing process. I think we have learned a lot. I know I have. And I feel that our committee is better equipped now to make the tough decisions that lie ahead than we were before we had the benefit of this information that has been made available to us.

Departmental witnesses, of course, have been before us. And all of this, taken together, will provide a basis for our decisions with respect to the levels of funding for the Department and its agencies for next year.

We thank you for contributing to that, and we appreciate the cooperation of all witnesses.

The subcommittee will stand in recess and reconvene at the call of the Chair.

[Whereupon, at 3:26 p.m., Thursday, May 8, the hearings were concluded, and the subcommittee was recessed to reconvene at the call of the Chair.]

# SUBMITTED STATEMENTS AND LETTERS

[CLERK'S NOTE: The materials which follow were submitted in lieu of an appearance before the subcommittee. The subcommittee wishes to assure each of those who submitted these materials that the information will be considered to the same degree as testimony which was read or submitted at the hearings.]

## STATEMENT OF SENATOR BOREN

MR. CHAIRMAN, I APPRECIATE YOUR PROVIDING ME WITH AN OPPORTUNITY TO SUBMIT TESTIMONY ON THE PROPOSED PLANS TO ELIMINATE FEDERAL FUNDING FOR THE HONEY BEE RESEARCH LABORATORY IN MADISON, WISCONSIN.

THE HONEY PRODUCTION INDUSTRY PRESENTLY INCLUDES OVER 210,000 BEEKEEPERS LOCATED THROUGHOUT THE NATION AND APPROXIMATELY 4.2 MILLION BEE COLONIES. IN 1981, THE VALUE OF THE NATION'S HONEY CROP TOTALED $117.5 MILLION. DATA FROM USDA IN 1981 INDICATED THAT HONEY BEE POLLINATING ACTIVITIES WERE WORTH 143 TIMES MORE THAN THE VALUE OF THE PRODUCTS THE HONEY BEES PRODUCED. THIS AMOUNTED TO ABOUT $17 BILLION IN 1981. ACCORDING TO USDA STATISTICS, IN 1973, ABOUT 3.5 MILLION ACRES OF FRUITS, VEGETABLES, OILSEEDS, AND LEGUME SEED CROPS PRODUCED IN THE U.S. WERE DEPENDENT UPON INSECT POLLINATION. ANOTHER 63 MILLION ACRES DERIVED SOME BENEFIT FROM INSECT POLLINATION. SINCE OUR CROP ACREAGE HAS INCREASED DRAMATICALLY OVER THE PAST TEN YEARS, IT IS UNFORTUNATE THAT USDA HAS NOT UPDATED THESE STATISTICS AS I BELIEVE IT WOULD PROVE THAT POLLINATION BY HONEY BEES IS EVEN MORE IMPORTANT THAN BEFORE.

MR. CHAIRMAN, PRESENTLY THE AGRICULTURAL RESEARCH SERVICE FUNDS BEE RESEARCH IN SIX FIELD LABORATORIES WHICH INCLUDE FACILITIES IN ARIZONA, LOUISIANA, MARYLAND, OKLAHOMA, TEXAS AND WISCONSIN. AS YOU ARE AWARE, THE DEPARTMENT OF AGRICULTURE HAS ANNOUNCED ITS INTENTION TO CLOSE TWO OF THESE FIELD LABORATORIES, THE FIRST OF WHICH IS LOCATED IN STILLWATER, OKLAHOMA, AND THE SECOND OF

WHICH IS LOCATED IN MADISON, WISCONSIN. IT IS APPARENT THAT THE DEPARTMENT'S DECISION TO CLOSE THE WISCONSIN FIELD LAB WOULD ELIMINATE THE ABILITY OF THE AGRICULTURAL RESEARCH SERVICE TO CONDUCT BEE RESEARCH IN NORTHERN LATITUDES AND COULD CERTAINLY DIMINISH OUR CAPABILITIES TO CONTROL MITES IN COLDER CLIMATES. IT IS MY UNDERSTANDING THAT THE AMERICAN HONEY PRODUCERS ASSOCIATION HAS EXPRESSED ITS OBJECTIONS TO THE ELIMINATION OF FEDERAL FUNDS FOR THIS BEE RESEARCH FIELD LAB.

I URGE THE SUBCOMMITTEE TO REJECT THE DEPARTMENT'S PROPOSED ACTION AND TO MAINTAIN ADEQUATE FUNDING LEVELS FOR THE FIELD LABS IN THE FISCAL YEAR 1987 APPROPRIATIONS.

## STATEMENT OF SENATOR BRADLEY

I regret that anticipated markups in the Finance Committee will prevent my being able to testify personally before your Subcommittee next week. However, I would like to indicate to you and to the other members of the Committee my special interest and concern for two specific agricultural programs.

Many of the crops grown in New Jersey are regarded as "minor crops" by the chemical and agribusiness industries. For example, well over one hundred different types of vegetables are cultivated on New Jersey farms. Unfortunately, the potential profits from pesticide and crop development do not necessarily offset the costs. Working with very limited resources, the InterRegional Research Program No. 4 (IR-4) has done an outstanding job to fill this gap. The list of achievements of the Program is long. Of particular interest to New Jersey farmers are the many pesticides for safe use on eggplants, blueberries, cranberries, peaches and tomato varieties that have received Federal approval due to IR-4 testing and research.

The IR-4 Program budget had been held constant--with no increase for inflation--at just $1.8 million since FY'82. The President's proposal for FY'87 would eliminate funding for the program and is clearly shortsighted. If anything, the merits and success of the program indicate the need for a greater commitment by the Federal Government. I urge the Committee to maintain at least current funding levels for the IR-4 Program.

A second program of real value and concern to New Jersey's farmers is the Extension Service. This is a national program of well documented value. The President is proposing cuts of over 50% nationwide, which would be crippling. However, for the New Jersey Extension Service, the proposed cuts total nearly 70%. A funding cut of this magnitude is unfair to New Jersey's farmers and devastating for New Jersey's very active and successful Extension Service. I have been privileged to work with the 4-H Program in our state and know what important positive contributions they have made to the development of the young people in New Jersey. I ask the Committee to maintain adequate funding for the Extension Service.

I am grateful for this opportunity to relate to you the value of these particular agricultural programs. I hope you will consider them favorably in your subcommittee's deliberations and I would request that this letter be included in the hearing record.

Sincerely,

Bill Bradley

## STATEMENT OF SENATOR DOMENICI

Mr. Chairman, I wish to address an issue that is of concern to myself and the beekeepers in the state of New Mexico and the Nation. Specifically, I am concerned by a recent decision by the Department of Agriculture to close the bee lab in Madison, Wisconsin.

I object to the closing of the Madison lab because this lab has served the honeybee industry very well for several years. Much beneficial research has come out of the Madison lab. Significant work on wintering bees has been completed in this lab and more research needs to be undertaken in the future where the winters are cold. If the Madison lab is closed, the remaining labs would all be located in areas of the country with a much more temperate winter climate. Closing this lab would necessarily preclude research on wintering honeybees. I hope this lab is not closed.

Mr. Chairman, thank you for allowing me to address this issue. I ask that a statement by Rick Cole, President of the New Mexico Beekeepers Association, be made a part of the hearing record.

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## STATEMENT OF PETE COLE, PRESIDENT, NEW MEXICO BEEKEEPERS ASSOCIATION

I am Rick Cole, President of the New Mexico Beekeepers Association. Several hundred people keep honeybees over most parts of the state. We are an important part of the agricultural industry as the bees pollinate many of the crops grown in New Mexico. Also, the honeybees play an important role in pollinating plants beneficial to wildlife.

Honeybees and their management are complicated. The Agricultural Research Service, USDA, has conducted research on bees and the role they play in pollination.

We appreciate this opportunity to make recommendations for bee research funding.

The ARS funds bee research in the following laboratories:

Tuscon, Arizona
Beltsville, Maryland
Weslaco, Texas
Stillwater, Oklahoma
Baton Rouge, Louisiana
Madison, Wisconsin
Logan, Utah

The budget for these studies is now about three million dollars. The USDA recommends the continuation of the present programs at approximately the same level of funding but with two changes. They wish to close the Madison bee lab and terminate research activities at Stillwater. We agree with the decision to stop research at Stillwater but believe the closing of the Madison lab to be a mistake.

Much beneficial research has come out of Madison. We cannot see where there will be any savings. If the Wisconsin lab was to be closed, that would leave all of the remaining labs in the southern and/or western parts of the country. Significant work has been done at Madison on wintering bees but more needs to be done and it needs to be done where the winters are cold. Also with the threatened invasion of the Africanized bee from Mexico, it would be well to have a lab that would be separated from the southern border and the more temperate climate of the west. There is also the threat of the Varroa mite which infests honeybeesmoving in from the south. Why do away with an equipped and established lab that could be bery valuable if it were the only area well removed from the mite infestation?

New research projects also need to be initiated. This could be done by redirecting some present work. One would be to study the Varroa mite before it gets here for possible controls. It is now in Brazil so we would like to see funds allocated for studies there.

One act that has really upset beekeepers was the horribly inaccurate GAO report on the honey program prior to the completion of the 1985 farm bill. It appears many of the misstatements and slanting were deliberate. Certainly, publicfaith in the governmental process is eroded when such a thing occurs. It is absolutely essential that accurate data be compiled for future reports.

And so we ask that the Agricultural Research Service do a study that would revise and update all statistical data in the following areas; domestic honey production, imported honey amounts and sources, pollination benefits to crops, pollination benefits to wildlife and the values of honeybee pollination to gardens.

This information gathered by the ARS would be of value to the beekeeping industry and to many segments of agriculture and governmental agencies such as the BLM and the Fish and Wildlife Service.

Thank you for giving these comments serious consideration.

## STATEMENT OF SENATOR HEFLIN

MR. CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO PRESENT TESTIMONY TO THE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES.

AFTER REVIEWING THE PRESIDENT'S PROPOSED FISCAL YEAR 1987 BUDGET, I FOUND SEVERAL AREAS RELATING TO AGRICULTURE AND RURAL DEVELOPMENT THAT GREATLY DISTURBS ME. I REALIZE THAT THE SENATE PASSED BUDGET RESOLUTION OVERTURNS MANY OF THE PRESIDENT'S PROPOSALS TO PHASE OUT MANY PROGRAMS, BUT I WILL STILL REGISTER MY CONCERNS WITH SOME OF THESE PROGRAMS AND ASK THAT THE COMMITTEE GIVE THESE PROGRAMS A HIGH FUNDING PRIORITY.

AS YOU KNOW, THE PRESIDENT'S BUDGET PROPOSES MAJOR CHANGES IN THE RURAL ELECTRIFICATION ADMINISTRATION AND THE RURAL TELEPHONE BANK LOAN PROGRAMS. ACTUALLY THE PRESIDENT REQUESTED THAT THE PROGRAMS BE PHASED OUT ENTIRELY BY 1990. THE ADMINISTRATION ALSO PROPOSED TO SELL SOME OF THE REA AND RTB LOANS ON THE PRIVATE MARKET.

ON APRIL 23, AND AMENDMENT WAS OFFERED TO THE BUDGET RESOLUTION THAT WOULD FOLLOW THROUGH WITH THE PRESIDENT'S PROPOSAL TO ELIMINATE REA. I WAS GRATEFUL THAT 82 OF MY COLLEAGUES JOINED ME IN VOTING DOWN THIS AMENDMENT. HOWEVER, I WAS, AND AM STILL CONCERNED WITH THE FINAL SENATE BUDGET RESOLUTION THAT CUT $500 MILLION FROM REA OVER THE NEXT THREE YEARS.

MR. CHAIRMAN, I URGE YOU AND THE MEMBERS OF THE COMMITTEE TO CAREFULLY CONSIDER ANY REDUCTIONS IN THE REA

PROGRAMS AND TO REJECT THE PRESIDENT'S PROPOSAL TO MAKE THESE CUTS.

OUR ELECTRIC COOPERATIVES ARE THE FOUNDATION FOR RURAL ECONOMIC DEVELOPMENT IN ALABAMA AND THE NATION. IT IS MY OPINION THAT THE MISSION OF THE RURAL ELECTRIC CO-OP PROGRAMS IS NOT COMPLETE. ABANDONING THESE PROGRAMS DURING A TIME OF RURAL RECESSION IS UNNECESSARY AND UNWISE.

THE COOPERATIVE EXTENSION SERVICE FACES CATASTROPHIC NEGATIVE CONSEQUENCES IF THE PRESIDENT'S DISPROPORTIONATELY TARGETED CUT IS ALLOWED TO STAND. WE URGENTLY NEED THE COMMITTEE'S SUPPORT IN RETURNING FEDERAL FORMULA FUNDING TO A LEVEL WOULD PERMIT OUR LAND-GRANT COLLEGES AND EXTENSION PERSONNEL TO PROVIDE A STABLE, DEPENDABLE, AND CONSISTENT BASE, WHICH IS MATCHED AND USUALLY EXCEEDED BY STATE FUNDS. I ALSO WOULD ASK THAT THE COMMITTEE CAREFULLY CONSIDER PRIORITY FUNDING FOR THE HATCH ACT FORMULA PROGRAM AND OTHER VALUABLE COOPERATIVE STATE RESEARCH SERVICE PROGRAMS.

I AM ALSO CONCERNED WITH THE ADMINISTRATIONS PROPOSAL TO TERMINATE MANY OF THE SOIL CONSERVATION SERVICE PROGRAMS. THE PROTECTION OF OUR SOIL AND WATER RESOURCES IS EXTREMELY VALUABLE TO THE FUTURE OF OUR AGRICULTURAL AND NATION. MANY STATES, INCLUDING ALABAMA, HAVE COMMITTED TO ASSUME A GREATER ROLE IN SOIL AND WATER CONSERVATION, BUT THIS INCREASED FINANCIAL RESPONSIBILITY OF THE STATES CANNOT YET SUFFICIENTLY FUND MANY OF THE TARGETED CONSERVATION PROGRAMS OR REPLACE THE TECHNICAL ASSISTANCE THAT IS NOW PROVIDED BY THE FEDERAL FUNDING.

MR. CHAIRMAN, THE CONSERVATION RESERVE PROGRAM OFFERS GREAT OPPORTUNITIES TO HELP CONSERVE OUR AGRICULTURAL LANDS. HOWEVER, THE PROGRAM COULD BE MORE BENEFICIAL TO OUR FARMERS. I WOULD HOPE THAT THE COMMITTEE WOULD GIVE SOME DIRECTIVE TO THE SECRETARY TO IMPLEMENT THE CONSERVATION RESERVE PROGRAM IN A MANNER THAT WOULD GIVE PRIORITY TO ACTUAL FARM PRODUCERS OVER ABSENTEE LANDOWNERS. THE COMMITTEE MAY ALSO WANT TO DIRECT THE SECRETARY TO GIVE SOME ATTENTION TO APPLICANTS THAT CAN SHOW THAT THEIR LAND IS ENCUMBERED WITH DEBT. IN MY OPINION, CONSIDERATION OF THESE TWO POINTS WOULD RETIRE ACTIVE CROPLAND THAT IS CONTRIBUTING TO THE SURPLUS SITUATION AND WOULD HELP ALLEVIATE SOME OF THE DEBT BURDEN ON OUR FARMERS AND CREDITORS.

I WOULD ALSO MENTION ANOTHER PROGRAM THAT HAS BEEN RESPONSIBLE FOR RETIRING MILLIONS OF ACRES OF MARGINAL LAND FROM PRODUCTION. THIS OF COURSE IS THE FORESTRY INCENTIVE PROGRAM. FIP IS A HIGHLY SUCCESSFUL PROGRAM, WHICH IS AIMED AT INCREASING TIMBER PRODUCTION ON PRIVATE, NON-INDUSTRIAL LAND, THAT WAS COMPLETELY ELIMINATED IN THE PRESIDENT,'S BUDGET. I WOULD REQUEST FUNDING OF $13 MILLION FOR THIS MUCH NEEDED PROGRAM.

THERE ARE SEVERAL SPECIFIC PROGRAMS UNDER THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE THAT HAVE BEEN TARGETED FOR REDUCTIONS. ONE IS THE BRUCELLOSIS ERADICATION PROGRAM THAT HAS BEEN A VERY SUCCESSFUL PROGRAM. I WOULD REQUEST MAINTAINING THE FY 1986 LEVEL OF $67 MILLION.

THE BOLL WEEVIL ERADICATION EFFORT IS AN EXCELLENT EXCELLENT EXAMPLE OF COOPERATIVE PROGRAMS AMONG FEDERAL AND

STATE RESEARCH, APHIS, COOPERATIVE EXTENSION, INDUSTRY STATE REGULATORY AGENCIES, AND FARMERS. THE PROGRAM HAS DEMONSTRATED THAT AREA-WIDE SUPPRESSION AND ERADICATION PROGRAMS ARE INDEED EFFECTIVE IN REDUCING FARMER'S COSTS AND ARE THUS IN THE NATION'S INTEREST. GROWERS IN GEORGIA, ALABAMA AND FLORIDA ARE CURRENTLY IN THE PROCESS IF SETTING ENABLING LEGISLATION THROUGH THE STATE LEGISLATURE. ALABAMA HAS PASSED A REFERENDUM REQUESTING THE BOLL WEEVIL ERADICATION EFFORT BE CONDUCTED IN THE STATE. FINAL GROWER APPROVAL WILL SOON BE A REALITY IN GEORGIA AND HOPEFULLY FLORIDA. AN ADDITIONAL $8.9 MILLION WILL BE NEEDED IN FISCAL YEAR 1987 TO COVER THE FEDERAL GOVERNMENT'S 30 PERCENT COST SHARE OF THIS PROGRAM.

MR. CHAIRMAN, I WOULD ASK THAT THE COMMITTEE CAREFULLY CONSIDER THE RECOMMENDATIONS I HAVE SET FORTH TODAY.

THANK YOU, MR. CHAIRMAN.

## LETTER FROM SENATOR INOUYE

May 2, 1986

The Honorable Thad Cochran
Chairman
Subcommittee on Agriculture,
Rural Development, and Related
Agencies
United States Senate
Washington, D.C. 20510

Dear Thad:

Thank you for your thoughtful letter of April 24th inviting me to bring my recommendations concerning FY 1987 agriculture appropriations to the attention of your subcommittee. I appreciated hearing from you and welcome the opportunity to respond to your request.

As in past years, I oppose the President's recommended cuts in the Agricultural Stabilization and Conservation Service, Farmers Home Administration, Soil Conservation Service, Extension Service, Agricultural Cooperative Service, Cooperative State Research Service, and the Food and Nutrition Service. I am particularly concerned about proposed reductions in basic research. For example, aquaculture offers this nation one of the most exciting frontiers for research and possible commercial development. Last year, the committee funded several aquaculture projects in Hawaii and on the mainland, including $150,000 for development of a Pacific aquaculture program in the State of Hawaii. Federal funding for these endeavors provides seed money which enables universities and private institutions to develop the knowledge and techniques required to develop commercial aquafarms. The University of Hawaii, the Hawaii State Government, and the Oceanic Institute, in conjunction with other research organizations around the country, have been active in developing a blueprint for future research in aquaculture. I would therefore ask that you make this letter and the enclosed testimony from Dr. Chauncey T. K. Ching, Mr. William C. Rowland, and Dr. Thomas D. McIlwain part of your subcommittee's printed hearing record for FY 1987.

Thank you for your time and consideration in this important matter. I look forward to working with you and other members of the Appropriations Committee to advance the cause of agriculture in the United States.

Aloha,

DANIEL K. INOUYE
United States Senator

## LETTER FROM CHAUNCEY T.K. CHING, CHAIRMAN, AD HOC AQUACULTURE GROUP

April 29, 1986

The Honorable Thad Cochran, Chairman
Appropriations Subcommittee on Agriculture,
Rural Development, and Related Agencies
U. S. Senate
United States Congress
Washington, D.C. 20510

Dear Mr. Chairman:

We respectfully request the privilege to submit written testimony before the Subcommittee during your deliberations on the FY 1987 appropriations bill for the U. S. Department of Agriculture. Specifically, we wish to present our perspective on the aquaculture provisions of the Food Security Act of 1985.

The state of Hawaii has worked hard in the development of aquacultural research and commercial interests. Our group has functioned for the last eighteen months and represents the collective research and development interests of the state and the greater Pacific region. Our purpose is to collaborate and cooperate in the solution of significant research and development problems facing the commercialization of aquaculture in the region and in the United States in general. It is our firm belief that aquaculture presents a major new food production technology for the world.

In light of our interests in the development of aquaculture and its success, we would like to draw the Subcommittee's attention to the opportunities present in Title XIV. This Title authorizes initiation of activities to encourage and foster aquatic food production in the United States.

We are grateful for the continuing support of you and your colleagues in responding to the opportunities in the development of this emerging food production technology. We look forward to the opportunity to submit what we believe are the issues critical to the development of aquaculture.

For the Ad Hoc Aquaculture Group,

Chauncey T.K. Ching
Chairman

## STATEMENT OF CHAUNCEY T.K. CHING

Mr. Chairman, I represent a group of colleagues from the public and private sector with a strong commitment to aquaculture. Thank you very much for allowing us to comment on Subtitle L of Title XIV of the Food Security Act of 1985.

Aquaculture is playing an increasingly important role in the national agricultural economy, as evidenced by the many agencies involved in aquaculture research and demonstration. Aquaculture is emerging as a vital national industry as well as a means to redress the fisheries trade deficit. Aquaculture has the potential to meet the American consumers' increased demand for aquatic products and the potential to contribute substantially to the domestic economy and to our nutritional needs.

Today I submit that we can best fulfill aquaculture's economic potential through implementation of Subtitle L. In particular, I address the national benefits that will result from establishing aquaculture centers.

A general advantage of aquaculture centers is that they would be mechanisms for integrating the expertise and support of the myriad agencies, educational institutions, and private organizations dedicated to research, development, and training in aquaculture. Programs from each of these sectors may be of extremely high quality but must be coordinated before we can identify the strengths, weaknesses, and future directions of aquacultural technology. By establishing these centers, we can have the considerable scientific resources of the nation as a whole moving forward in a planned and coordinated manner.

The state of Hawaii has long recognized that aquaculture is an environmentally sound complement to diversified agriculture and has given it a high priority in state development plans. In fact, Hawaii was the first state to prepare a comprehensive aquaculture development plan.

The importance of involving the private sector cannot be overstated. When my colleagues and I established the Ad Hoc aquaculture group, our first priority was coordinating activities in the public and private sectors. It is our belief that the development of the aquaculture centers provided for by Subtitle L should reflect a similar mix of private and public expertise. Including public and private organizations in the centers ensures that the knowledge created through research is extended to practical applications.

A continued high level of interest in aquaculture in Hawaii has resulted in an impressive level of expertise available. Over the past decade, a scientific and technological infrastructure has emerged from the significant progress made in culture, technology and development. Coordinating these research efforts under the aegis of a center for aquaculture will concentrate all our expertise on eliminating the remaining economic and technological constraints to commercial production and on developing large-scale, profitable aquaculture.

There are distinct advantages to the establishment of an aquaculture center in the tropics in addition to the obvious benefits accrued to Hawaii, Puerto Rico, the Virgin Islands and other U.S. tropical territories. There is increasing interest in the culture of sub tropical species such as Tilapia and some species of marine shrimp in the temperate zone in the U.S. An aquaculture center in the tropics would permit year round research and development of such species with the results being passed on to our colleagues throughout the U.S. through the other aquaculture centers. In addition, the maintenance of brood stock as well as genetic improvement to these stocks can better be accomplished in the tropics with favorable year round growing conditions. For example we can get three crops a year of some marine shrimp versus but a single crop in the temperate zone. Aquaculture in the tropics is therefore not only advantageous from the production standpoint but also from the perspective of research accomplishments in the national interest.

Mr. Chairman, I respectfully submit that we should not continue to rely on diminishing fisheries nor ignore increasing U.S. trade deficits for fish and shellfish. We should not continue to count on an aquaculture industry being built on scattered and uncoordinated research efforts. We should not continue to believe that economic benefit can accrue to a business without an adequate supply of trained personnel. We should not expect to be of service to lesser developed countries without establishing a solid base in our own country. Most of all, we should not continue to expect old methods will yield new results. If aquaculture is to continue its present growth, we must have a means of coordinating aquacultural knowledge both public and private. It is our belief that Subtitle L. of Title XIV, the Food Security Act of 1985, can be the means to accomplish this and I request your support.

Mr. Chairman, this concludes our testimony. Thank you for this opportunity to discuss this important issue.

## STATEMENT OF WILLIAM C. ROWLAND, PRESIDENT, THE OCEANIC INSTITUTE

In FY86, 1.3 million dollars was appropriated to the Gulf Coast Research Laboratory Consortium to continue development of a United States Marine Shrimp Farming Industry. Our goal is the development of a U.S. industry capable of substantially reducing a one billion dollar annual import trade deficit in marine shrimp.

The Consortium, comprised of the Gulf Coast Research Laboratory, Tufts University, and the Oceanic Institute, has identified the "key" constraints to industry expansion in the United States. Successful competition by the United States against foreign imports is dependent upon improved management and marketing strategies, more advanced technology, and an improved business development climate. Without these improvements and advances, higher land, labor, and materials costs, and strict environmental regulations and controls in the United States will prevent substantial industry expansion.

From the very beginning, the Consortium has pledged to embrace the most effective people and the very best institutions in a cooperative effort to accelerate industry development. During the past few months, negotiations with Texas A&M University, Marine Shrimp Program; State of South Carolina, Division of Marine Resources; and Amorient Aquaculture International, have been completed, and cooperative research agreements developed. The Consortium is also working closely with the State of Hawaii, the University of Hawaii, and the University of Arizona, to develop additional cooperative agreements.

We are currently working to prepare a master plan for the development of marine shrimp farming in the United States. In preparation of that plan we found that most support of aquaculture development to date, has been directed to technology research through academic institutions. It is also clear that resources are spread very thin in attempting simultaneous development of several industries. While the work is laudable, it is clear to us that accelerated industry development requires additional attention to management, marketing, and business development climate problems. Similarly, we recognize the need to engage industry/business expertise at a much higher level. It is equally clear to us that marine shrimp is one of this country's outstanding aquaculture opportunities. The concentration of resources sufficient to achieve a critical mass in marine shrimp farming development, offers our best chance at success.

The Consortium program is then directed to industry development, rather than academic research. Private, commercial, government, and university communities are being joined in this marine shrimp industry development. Certainly we do not preclude basic research, but only if it has been identified as essential to industry development.

The benefits for our home state of Hawaii are substantial. We are in one of the "key" U.S. regions slated for expansion of the marine shrimp industry. We look forward to increasing amounts of top quality seafoods, and creation of new jobs, and new industry.

We are extremely grateful for the support we have been provided. In FY85 the Committee generously provided $750,000 initial appropriations and $300,000 in FY supplemental appropriations to initiate the work of the Consortium. In FY86 the Subcommittee has provided $1.3 million. This year we are asking for a supplemental appropriations of $800,000 in FY86, and for FY87 we request $2.6 million for the operation and acceleration of the Consortium's commercial development plan.

## STATEMENT OF DR. THOMAS MCILWAIN, GULF COAST RESEARCH LABORATORY, OCEAN SPRINGS, MS

Mr. Chairman and Members of the Subcommittee, on behalf of the Gulf Coast Research Laboratory Consortium, I wish to thank you for your support of the Consortium's U.S. Marine Shrimp Program. It is a pleasure to have the opportunity to again appear before you to present positive testimony on this project. In recent years, the fastest growing segment of our food-producing community - aquaculture - has become of critical importance to our economy. This is particularly true in the production of marine shrimp.

A profitable domestic marine shrimp culture industry in the United States depends on American shrimp farmers being able to compete successfully with foreign imports. They cannot do so without a concerted action program which develops and applies advanced technology and management strategies to offset both operating costs and meet strict environmental regulations and controls. The one billion dollar plus annual deficit in imported marine shrimp indicates that a more expedient vehicle, coupling a business and marketing perspective with scientific and technological expertise, is required if the industry is to reach its full economic potential. Without stringent and coordinated effort, the industry may lose ground rather than gain it.

In FY86, 1.3 million dollars was appropriated for the Gulf Coast Research Laboratory Consortium to continue development of a U.S. Marine Shrimp Farming Industry. The Consortium combines the considerable experience and skills of the Gulf Coast Research Laboratory, Tufts University, and the Oceanic Institute. The program's long-range target is to substantially reduce this marine shrimp trade imbalance by achieving the aforementioned objective. Industry constraints have been identified, and research directions and objectives have been set. The Consortium's goals are not that different from those taught in Business 101 - - reduce risk and increase profit. The approach of the Consortium, however, makes it almost certain that this goal will be achieved - - and that was not taught in Business 101.

The Consortium program is directed to industry development rather than pure academic research. Thanks to numerous colleagues who have and are conducting thorough aquacultural investigations, we know shrimp can be bred and grown in captivity. What we need to know for the industry development is how to grow them cheaply and sell them profitably; we need to identify markets and marketing strategies; and we need to communicate research and marketing information to the people who need it most - - the shrimp farmers and potential shrimp farmers. These are needs that the Consortium is dealing with through the collective efforts of private, commercial, governmental and university communities.

By balancing short- and long-term benefits and capitalizing on existing public and private expertise, the Consortium effort surmounts academic, commercial, and governmental barriers to address industry constraints directly. And, rather than dilute the concentration of the program's focus, investigations are centering on a few selected high probability shrimp species and production systems.

In terms of production technology, the Consortium's work is directed to high priority, practical opportunities to increase yields, extend effective growing periods, to prevent or treat disease, and insure adequate supplies of quality seed stock at reasonable prices. In terms of business management, the Consortium is developing methods to overcome perceived weaknesses in management, marketing, and business development.

Strategies, whether marketing, management, or technical, are only as good as the strategists. From the beginning, the Consortium has planned to include the highest calibre institutions and staff in this cooperative effort. During the past few months, cooperative research agreements have been developed with the Marine Shrimp Program of Texas A&M, with the Division of Marine Resources, State of South Carolina, and with Amorient Aquaculture International. The Consortium is now working to develop additional cooperative agreements with the State of Hawaii, the University of Hawaii, and the University of Arizona.

In FY87, critical lines of research will be continued with the help of all the Consortium partners. In addition, we will begin constructing and operating high-tech, low-cost hybrid production models or prototype systems. These will incorporate applicable methods of semi-intensive, intensive or highly intensive technologies where necessary according to regionally-specific supply, service and marketing infrastructures.

We know that American shrimp farmers serving specialty markets are having some success. The efforts of this Consortium can extend this success to larger markets and hasten the development of shrimp farming as a viable and profitable domestic business.

We urge the committee to continue its support for the expansion and acceleration of this industry development effort which has major potential for the United States economy.

Therefore, we ask for a supplemental appropriation of $800,000 in FY 86, and for FY 87, we request $2.6 million for the operation of the Consortium's commercial development plan.

Thank you for the opportunity to appear here before you today. I will be happy to answer any questions.

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## STATEMENT OF RODNEY FOIL, DIRECTOR, MISSISSIPPI AGRICULTURAL AND FORESTRY EXPERIMENT STATION, MISSISSIPPI STATE UNIVERSITY

I am pleased to file this statement in support of the need for additional aquaculture research, to accompany testimony of a panel of interested citizens and scientists supporting the funding of regional aquaculture centers for the United States.

This subcommittee, and particularly the chairman, is well aware of the importance of aquaculture as a growing contributor to the United States agricultural economy and to the well-being of American consumers. In Mississippi, the pond-raised catfish industry has become a leader in economic development, and in the application of modern technology in the production of nutritious and economical food. Much of this progress has been due to investments in research and extension sponsored by this committee and the states of the Southern Region.

The directors of Experiment Stations and Extension Services in the South have long supported aquaculture. They authorized and funded a Regional Research Project on Warmwater Aquaculture some fifteen years ago, and this effort has grown to a cooperative venture involving thirteen southern agricultural experiment stations, six state university research programs, the Tennessee Valley Authority, and two units of the U. S. Department of Interior. Through this regional mechanism, the South has accomplished pioneering research while ensuring cooperation and coordination. Recently, the directors of Extension in the thirteen southern states joined with the Southern Experiment Station Directors in the creation of a joint committee to establish additional procedures for cooperation and coordination of functions. Research and Extension directors in Mississippi, Louisiana, Arkansas, and Alabama have been charged in the development of a position paper identifying issues and activities to be taken to strengthen research and extension efforts in aquaculture.

The Southern Region is truly committed to working together to expand aquaculture research and extension. Should funding become available to support regional centers, the mechanism is in place in the South to utilize such funding efficiently and effectively.

## STATEMENT OF SENATOR MCCONNELL

I appreciate the opportunity you've given me to make this presentation. I come before this subcommittee to request an appropriation for what I feel is a most worthy cause.

The Food Security Act of 1985 represented a major philosophic shift in our nation's agriculture policy. With the benefit of hindsight, it is apparent that our past commodity programs contributed to, rather than prevented, the current crisis in agriculture; farmers were encouraged to plant "fencerow to fencerow" while target price and loan rate increases priced us out of world markets and short-sighted foreign policy in the form of the Russian grain embargo tagged the U.S. as an unreliable supplier of agricultural products. We were forced to make some difficult decisions when drafting the 1985 Farm Bill, but this legislation took some important steps toward solving our trade problems, allowing our country's farmers to compete worldwide.

If the recent consternation displayed by several competitor nations is any indication, those steps were in the right direction.

Perhaps the most important provision made by Congress for recapturing our lost world market share was the scheduled reduction in target prices and loan rates for program commodities. In doing this we committed ourselves to ending our role as residual supplier of agricultural products to the world. In doing this, also, we dedicated ourselves to carrying out several programs designed to facilitate the development and expansion of agricultural markets abroad; export PIK, cooperator market development, short term export credit, and food assistance programs to lesser developed countries, among many others, were all elements of a broad initiative to help farmers and agribusinesses improve their ability to access foreign markets.

One provision in the Farm Bill, I believe, has great potential for helping to expand agricultural exports. Section 1419 amends the National Agricultural Research, Extension, and Teaching Policy Act of 1977 by mandating grants to States for the establishment and operation of international trade development centers. These centers would utilize various resources to "enhance the exportation of agricultural...and related products."

Activities might range from making available to potential exporters information vital to conducting business in foreign countries--marketing data, transportation needs, insurance and financing opportunities--to establishing contacts within trade ministries of foreign governments. A trade center might be the sight of trade delegation meetings or a place where businessmen could go to learn about new markets. Their charge is a very broad one, and, if established, trade centers could have a broad impact on the health of American agriculture.

I strongly support the idea of international trade centers and believe that Kentucky is an appropriate location for such a facility. Kentucky's is one of the most diverse agricultural economies in the nation. We have the finest thoroughbred horses, as well as the best burley tobacco in the country. Our farmers rank 10th in soybean production and 12th in corn. We have over 7,000 dairies and the 2nd largest number of cattle east of the Mississippi river. We produce lamb, pork, poultry, wheat, hay, sorghum--virtually anything that grows. We have much to gain by expanding exports.

Kentucky is fortunate, in addition, to have at its disposal a respected institution of higher education--the University of Kentucky. Their reputation as a leader in agricultural research and extension is well established, as is their expertise in international affairs through the outstanding program at the Patterson School of International Diplomacy.

The influence of the trade center need not be confined by state lines. Kentucky is in the center of some of the richest agricultural lands in the country and is accessible by many states who could derive great benefit from the trade center's activities. An agribusinessman from Mississippi or a farmer from Tennessee or students from Georgia stand to gain as much from this facility as does agriculture in the Commonwealth of Kentucky.

Utilizing these resources, the trade center at the University of Kentucky, as proposed, would carry out its mandate on three levels: research, information delivery and education. Researchers would analyze products and geographical areas which displayed potential for increased export, studying topics as wide ranging as market potential for some given product to changing patterns in exports.

Professionals at the University would link potential exporters with potential importers through presentations, lectures or trade seminars. Area businessmen could obtain technical assistance and valuable insight necessary for export development.

The trade center would provide resources for training individuals and businesses interested in the nuances of exporting; they would school these businessmen in the fundamentals of international commerce--ie., contract terms, transportation arrangements, cultural considerations, dealing with foreign trade misistries, handling foreign exhange risk, etc.. Undergraduate and graduate students interested in this discipline could take classes to learn the elements of international marketing and trade or participate in structured internships with companies involved in exporting agricultural products.

I am requesting funding of $1.89 million, to be matched by state and private sources, for the purpose of establishing and operating an international trade development center at the University of Kentucky. This appropriation would serve as a permanent endowment, the interest on which would be used to meet annual operating expenses of $151,000 per year. The federal contribution would pay for conferences, travel, consultants and various overhead expenditures while the non-federal monies would pay for personnel salaries.

We have here an excellent opportunity to provide much needed assistance to a financially pressed sector of our economy. The future of American agriculture is abroad and the success of our farmers and agribusinessmen will lie in their ability to adapt to the needs and demands of the world marketplace. The international trade center at the University of Kentucky will do much to strengthen agriculture in Kentucky and the South East and pave the way for a new era in agribusiness.

## Letter From Michael R. Reed, Associate Professor, University of Kentucky College of Agriculture

The Honorable Mitch McConnell
United States Senate
SR 120 Russell Senate Office Bldg.
Washington, D.C. 20510

May 5, 1986

Dear Senator McConnell:

I appreciate the interest and enthusiasm you and your staff have shown in regard to establishment of an international trade development center at the University of Kentucky. Please find enclosed a proposal to establish such a center.

There is no question that an international trade development center would not only help farmers and agribusinesses throughout Kentucky, but also enhance the regional and national standing of the University.

I thank you for your assistance on this proposal and look forward to hearing from you on its progress.

Sincerely,

Michael R. Reed

Michael R. Reed
Associate Professor

### A PROPOSAL FOR AN INTERNATIONAL TRADE DEVELOPMENT CENTER AT THE UNIVERSITY OF KENTUCKY

The agricultural economy throughout the United States is in a crisis situation. Agriculture has become increasingly reliant on an international market which has collapsed in recent years. The consensus is that farm exports must increase if agriculture is to recover from today's depression.

Exporting of many U.S. agricultural commodities, especially major grains, are dominated by huge, complex corporations with information, research, and development staffs which monitor markets throughout the world. Given this vital international network, improved macroeconomic conditions will insure an increase in exportation of these products.

However, there are a multitude of agricultural products which have no well developed, formal export system, but still have export market opportunities. Presently, the international flow of these commodities is not large enough for huge corporations to become involved, but there are still opportunities available for smaller producers and agribusinesses with expertise in international marketing. The problem is that very few agricultural firms have the necessary skills for successful export marketing. The International Trade Development Center at the University of Kentucky would help these producers and agribusinesses in Kentucky and the South establish linkages which are crucial for successful exporting.

Kentucky is an ideal location for such a center because agriculture and agribusiness in the State is involved in a wide diversity of products. Many of these products have legitimate export markets (e.g., breeding stock, tobacco, distilled spirits and white corn) which could be exploited further if international marketing expertise were improved. Export markets for other products (e.g., ornamentals and seeds) could also be developed. Further, Kentucky is close to other Southeastern States which also produce products with no formal exporting system. The Center will include producers and agribusinesses in surrounding states in all of its activities.

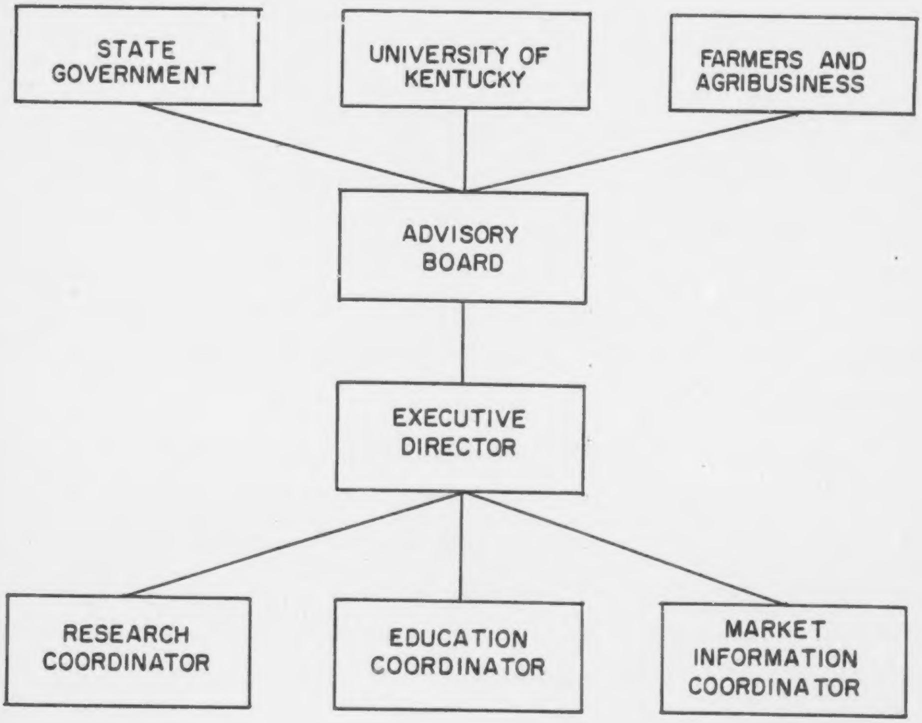
The Center has three major activities: Information Delivery, Research, and Education. All of these activities are oriented toward increasing export markets for U.S. agricultural products -- especially highly processed products. The market information function of the Center will link potential exporters with potential importers through presentations, exhibits, and brochures. The research activity will involve investigation of potential products and geographic areas where exports could increase. The educational function of the Center would focus on training potential exporters and university students on the elements involved in successful export marketing.

The organizational structure of the Center reflects the three objectives (see the organization chart). The Advisory Board sets the general policies and objectives of the Center. Members of the Board represent the private sector, State Government, and the University of Kentucky. The Executive Director is in charge of the daily operation of the Center and serves as the laison with the Advisory Board. The Marketing, Research, and Education Coordinators are in charge of carrying out their respective functions, consistent with the Center's purpose. The final position is an Administrative Assistant, which provides secretarial, clerical, and administrative assistance to all employees of the Center.

The attached budget includes funding for personnel, conferences, travel, and other current expenses on an annual basis. It is requested that the U.S.

Department of Agriculture establish an endowment which is used to fund all non-personnel expenses of the Center. This is $ 151,000 annually or a $ 1.89 million endowment, based on the endowment earning 8.0 % per annum.

ORGANIZATION CHART FOR AN INTERNATIONAL TRADE DEVELOPMENT CENTER.


STATE GOVERNMENT
UNIVERSITY OF KENTUCKY
FARMERS AND AGRIBUSINESS
ADVISORY BOARD
EXECUTIVE DIRECTOR
RESEARCH COORDINATOR
EDUCATION COORDINATOR
MARKET INFORMATION COORDINATOR

## ESTIMATED ANNUAL BUDGET

| | Non-Federal | Federal |
|---|---|---|
| SALARIES | | |
| Executive Director | $ 60,000 | |
| Marketing Director | 30,000 | |
| Education Coordinator | 30,000 | |
| Research Coordinator | 30,000 | |
| Administrative Assistant | 20,000 | |
| CURRENT EXPENSES | | |
| Conferences | | 57,000 |
| Travel | | 48,000 |
| Consultants | | 10,000 |
| Telephone and Supplies | | 20,000 |
| Computer Graphics and Telecommunications | | 15,000 |
| Printing and Video Production | | 11,000 |
| TOTALS | $ 170,000 | $ 151,000 |

## APPENDIX

### Activities

The research activity will be a combination of short-term, market opportunity-type research and long-term market structure research. The short-term research will investigate potential products and geographic areas which might provide opportunities for increased exports. This research could be in response to requests by specific firms or could be more generic and broad-based. A key element in the short-term research category is that it should take less than two months to complete.

The long-run analyses will investigate the factors which determine trade flows and project future trade patterns which will impact U.S. export markets. A major effort in this area would be to study the effect of macroeconomic factors, such as U.S. monetary policy (interest rates and money supply growth), on world economic activity and U.S. exports of specific agricultural products.

The educational function of the center would focus on exporters, farm leaders, and university groups. Education for exporters and farm leaders would come in the form of conferences which present the nuances of export marketing, such as contract terms, letters of credit, transportation arrangement, cultural considerations and foreign exchange risk. These conferences would be very basis at first, but could concentrate on more specific topics (i.e., targeting geographic areas or particular products) as the Center's audiences become more sophisticated.

The university education program would involve teaching at least one course at the undergraduate and graduate level on international marketing and trade. The Center would also work on establishing, coordinating and, possibly, subsidizing internships for students interested in international marketing. This activity would benefit students and could provide a significant impetus for potential exporters to get involved in exporting. If enough interest is generated at the undergraduate level an International Marketing degree option could be added to the Agricultural Economics major.

The market information function of the Center is to link potential exporters with potential importers. This would involve presentations to agricultural producers (and marketers) on the benefits of exporting and ways that exporting difficulties can be overcome. The Center could help design brochures and provide translation services for agriculturalists to promote their products to overseas buyers. Exhibits for trade shows and foreign delegations would generate market windows for exports. The effort would be extended to overseas trips to educate foreigners on a host of agricultural products which are available from the U.S. Once exporters and importers are linked, the Center could act as a facilitator to insure that initial transactions go smoothly.

Organization

The Executive Director of the Center is in charge of the day-to-day operation of the Center. This person will serve as laison with the University and State Government, and The Executive Director will also coordinate the long-term research activities and internships through involvement with students in the department of agricultural economics. A final task for the Executive Director is to write and submit grant proposals to various public and private institutions which will allow the Center to expand its activities.

The Marketing Director and Education Coordinator will be in charge of the activities under the market information and education components, respectively. The Education Coordinator will also work on lining up internships for undergraduate and graduate students.

The Research Coordinator will monitor and perform the short-term research for the Center, with some help from the Executive Director. The coordination will occur when individuals must be hired on a short-term basis to help with research. Undergraduate and graduate students in the agricultural economics department will serve as a good pool for such labor.

The final position is an Administrative Assistant, which will provide secretarial, clerical and administrative help. Much of the details on conferences (i.e., lining up facilities, meals, equipment) would be handled by this person.

## Budget

The budget includes money for the permanent personnel, conferences, travel, consultants, and other current expenses. The attached budgets give rough estimates of the annual monies involved.

The conference budget assumes three one-week, three two-day, and three single-day conferences each year. It includes a charge for facilities, and hotel expenses and at least one provided meal each day for thirty participants.

The consultants are any people involved with the Center on a short-term basis. These people would include conference speakers, research assistants, language specialists, and design specialists.

The travel budget includes eighteen one-week trips to overseas destinations (estimated at $ 36,000) and $ 12,000 in domestic travel.

## STATEMENT OF SENATOR PRESSLER

I want to first thank you for the opportunity to express my views on the Fiscal Year 1987 Agriculture, Rural Development and Related Agencies budget. I have heard from many of my constituents on various proposals and will be summarizing the concerns of South Dakotans in my testimony.

The Administration's proposal to phase out the Rural Electrification Administration and to sell the Federal Power Marketing Administrations has been opposed most widely in South Dakota. This spring, petitions opposing these actions have been circulated throughout South Dakota by rural electric cooperatives. Over 60,000 people have signed the petitions. Once again this year a heavy spring snowstorm with high winds caused widespread damage to power lines in many parts of South Dakota. Without the REA program, the rural cooperatives would not be able to repair many of these lines. We must maintain a strong REA program.

The delay in the issuance of advance deficiency payments and other ASCS program payments this spring caused a great deal of inconvenience for many farmers. This resulted from delay in the passage of a supplemental appropriations bill. I want to commend you for your work in getting this bill passed. However, we must try to avoid the need for supplemental appropriations, if possible. The higher level of participation in farm programs has caused a shortfall in funds. In FY 1987 the funding level for CCC should be set high enough to avoid such delays.

There is also a great deal of concern about the problems many farmers experience in obtaining operating loans and participating in various debt restructuring or interest writedown programs. I am well aware that many of these problems are administrative, but we should work to assure that USDA and other federal agencies effectively administer and use funds authorized and appropriated by Congress.

Funding for soil and water conservation programs has also been a major concern to South Dakotans. Now that we have sodbuster and swampbuster provisions, as well as a longterm conservation program, it is important that we do not abandon other conservation programs. Soil Conservation Service funding has been cut back on several occasions and further reductions will have a major impact on services provided to farmers and ranchers. We must maintain the Soil Conservation Service and other conservation programs in order to effectively control soil erosion.

As a former 4-H member, I share the concern of hundreds of South Dakotans about the proposed 59 percent reduction in funding for the Extension Service. During these financially troubled times in rural America, the services provided by the Extension Service are needed more than ever. The Extension Service has developed several programs to help farmers keep better production and financial records, make needed changes in their operation and deal with the trauma of losing a family farm. These programs are desperately needed in rural communities and cannot be provided if major spending cuts are imposed.

These are just a few of the agriculture funding issues I have been hearing about from my constituents. Concern has been expressed over changes in the federal crop insurance program, additional fees being imposed on credit programs, reductions in the school lunch program and funding for sewer and rural water development. These issues are of great importance to South Dakota, which is the most agricultural dependent state on a personal income basis. I urge you to consider the impact of these proposals on my state and other rural states before the committee acts on any of the agricultural funding proposals.

Thank you again for allowing me to express my views and the concerns of South Dakotans. I look forward to continuing to work with you on agricultural issues.

## STATEMENT OF SENATOR SYMMS

Mr. Chairman and members of the Committee:

The economic health of the State of Idaho is strongly dependent on the basic natural resource industries. The most basic of these, and the most crucial to the state's economy, is agriculture.

Idaho's agricultural industry, in common with the rest of the nation, has been struggling for several years. In the long term the direction charted by the 1985 Food Security Act has the potential of leading American agriculture back to a position of relative strength. This will only happen, of course, if our overall economy remains reasonably healthy.

We are moving in the right direction. Inflation has been brought under control, interest rates are falling and the dollar is reaching a more reasonable level in comparison with other currencies. The deficit however remains an issue of overriding concern.

Because I'm convinced that cutting the deficit is absolutely crucial to all of us, I will cover only those programs that are of the greatest impact and importance to Idaho.

I appreciate the opportunity to bring these items to your attention and request specific funding for each.

### AGRICULTURAL RESEARCH;

Research supplies the tools we need to compete successfully in world agriculture. It is absolutely essential to the future of our farmers. I'm told that a dollar invested in research returns as much benefit to the producer as seven dollars in subsidies. This ratio may, in fact, be low.

Four particular research efforts are important at this time.

**(1) Dark End Syndrome in Potatoes:**

Idaho's famous potatoes are afflicted with a disease of unknown cause that turns starch to sugar causing a discoloration that makes them unsuitable for certain products. This needs research attention and funding.

**(2) Small Grains Collection:**

The nation's small grain collection facility is being transferred to the Agricultural Research Station at Aberdeen, Idaho. I urge that this facility be funded at a level that will allow continuation, if not acceleration, of developement of new grain strains.

**(3) Ethanol:**

Grain surpluses threaten a long period of low prices and expensive storage. I urge that research be devoted to testing the use of larger volumes of surplus grains as feed stocks for ethanol and, if warranted, developing new feed stocks as a separate priority.

**(4) Livestock Imports:**

There is conflicting data on the impact of livestock imports on domestic livestock prices. Enough research must be done on this subject to determine and publish the facts.

**SOIL CONSERVATION:**

Next to research, our most prudent agricultural investment has to be protection of the basic resources of soil and water. Its poor economy to reduce the capability of the Soil Conservation Service to support farmer-initiated conservation projects. Its important that the Soil Conservation Service receive adequate funding to meet the farmers' needs in this critical area.

**CROP REPORTING SERVICES:**

My constituents in the farming community place a high value on the crop reporting services. As an example, the barley growers have recently contacted me urging that this service be provided. The reporting services provide growers with information that allows them to more nearly match market demand. They can be seen as a device for avoiding surpluses. They are worth-while and should be continued.

**ANIMAL DAMAGE CONTROL:**

After years of intensive effort, the Animal Damage Control program has been transferred from the Department of Interior to the Department of Agriculture. The change will benefit all farmers and ranchers. Unfortunately, in the process, the program has been sadly under-funded. For full efficiency, $23 million is needed. This includes a recommendation from the Environment and Public Works Committee, which has over-sight for the Fish and Wildlife Service, that $3 million be budgeted for additional administration costs.

Mr. Chairman, I thank the Committee for its time and look forward to working with you on these important matters.

## STATEMENT OF SENATOR TRIBLE

MR. TRIBLE. MR. CHAIRMAN, I AM GRATEFUL FOR THE OPPORTUNITY TO PRESENT MY VIEWS REGARDING A NUMBER OF SIGNIFICANT PROGRAMS UNDER CONSIDERATION BY YOUR COMMITTEE.

LAST DECEMBER THE FOOD SECURITY ACT OF 1985, COMMONLY CALLED THE FARM BILL, WAS ENACTED INTO LAW. THIS ACT RESULTED FROM THE REALIZATION THAT FEDERAL AGRICULTURAL PROGRAMS COULD NOT CONTINUE AS THEY HAD FOR THE PAST 50 YEARS. IT IS ESSENTIAL THAT WE MOVE TOWARD A MORE MARKET ORIENTED AGRICULTURE. THE FARM BILL WAS A REALISTIC FIRST STEP.

THE CONGRESS SENT ANOTHER IMPORTANT MESSAGE WHEN IT PASSED THE FARM BILL. NO LONGER WILL WE SUBSIDIZE AGRICULTURAL PRACTICES WHICH CAUSE MASSIVE SOIL EROSION, POLLUTE WATER WITH SEDIMENT AND OTHER CONTAMINANTS, OR THAT DRAIN IMPORTANT WETLANDS. I FULLY SUPPORT THE CONSERVATION TITLE OF THE FARM BILL AND TRUST THIS SUBCOMMITTEE WILL ENSURE THAT THE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE AND THE SOIL CONSERVATION SERVICE WILL HAVE THE FUNDS TO ADMINISTER THESE PROVISIONS AND PROVIDE THE NEEDED TECHNICAL ASSISTANCE.

THESE CONSERVATION PROVISIONS WILL HELP US TO MAINTAIN THE PRODUCTIVE CAPACITY OF OUR NATION'S FARM LAND, AND HELP TO RESTORE THE QUALITY OF OUR RIVERS, LAKES, AND ESTUARIES SUCH AS THE CHESAPEAKE BAY.

THE CHESAPEAKE BAY RESTORATION PROGRAM IS ONE OF OUR HIGHEST PRIORITY DOMESTIC PROGRAMS. ITS WIDESPREAD POPULAR SUPPORT EXTENDS FROM THE SHORES OF THE BAY TO THE ENTIRE NATION.

LAST YEAR, MR. CHAIRMAN, IN RESPONSE TO A REQUEST FROM THE SIX SENATORS OF THE STATES OF PENNSYLVANIA, MARYLAND, AND VIRGINIA, THIS SUBCOMMITTEE RESPONDED POSITIVELY BY SUPPORTING SCS INVOLVEMENT IN THE PROGRAM. THIS IS BEGINNING TO PAY OFF; AS A RESULT OF LAST YEAR'S APPROPRIATION LESS SOIL AND OTHER CONTAMINANTS ARE REACHING THE BAY.

THIS WAS A VALUABLE FIRST STEP. IT IS MY HOPE THAT THE SUBCOMMITTEE WILL CONTINUE TO PROVIDE ADEQUATE SUPPORT FOR CONSERVATION OPERATIONS.

IN ADDITION, I WOULD HOPE THAT FUNDS MIGHT BE AVAILABLE FOR ADDITIONAL EXTENSION AGENTS. THESE AGENTS WOULD BE EMPLOYED BY THE COOPERATIVE EXTENSION SERVICES OF VIRGINIA, PENNSYLVANIA, AND MARYLAND. WORKING IN COOPERATION WITH CONSERVATION DISTRICTS, THEY WOULD CONDUCT FIELD DEMONSTRATIONS, FARMER FIELD DAYS, MEDIA PRESENTATIONS, AND PRODUCE INFORMATIONAL MATERIALS TO TRANSFER TECHNOLOGY TO FARMERS. THEY WOULD ALSO ADVISE FARMERS OF FEDERAL AND STATE INCENTIVE PROGRAMS TO ASSIST IN THE APPLICATION OF CONSERVATION TILLAGE, LIVESTOCK WASTE MANAGEMENT, BUFFER STRIPS, NUTRIENT AND PESTICIDE MANAGEMENT, AND OTHER MEASURES WHICH CONTRIBUTE TO IMPROVEMENT OF WATER QUALITY.

FINALLY, I WOULD HOPE THAT AGRICULTURAL RESEARCH SERVICE SCIENTISTS WOULD HAVE THE RESOURCES TO SEEK MORE COST EFFECTIVE WAYS TO REDUCE CROPLAND SOIL EROSION AND CHEMICAL POLLUTION OF THE BAY AND ITS TRIBUTARIES.

THESE RESOURCES ARE BADLY NEEDED AND APPROVAL OF THEM BY THE COMMITTEE WILL SIGNIFICANTLY ACCELERATE THE RESTORATION OF THE CHESAPEAKE BAY.

## STATEMENT OF SENATOR ZORINSKY

Mr. Chairman, I welcome this opportunity to present testimony before your subcommittee on the President's fiscal year 1987 budget for agriculture.

At the outset, I would like to bring two matters to the attention of this committee. The first matter is the USDA's proposal to close the Soil Conservation Service technical center in Lincoln, Nebraska. This proposal directly affects the budget, with the cost of consolidation of the four national technical centers (NTCs) into one in Fort Worth, Texas, estimated at $5.4 million.

I can see no positive value in the move. In fact, the many reasons for maintaining the technical center in Lincoln clearly outweigh any real or perceived future cost savings.

We can expect a delay in the correlation and publication of soil survey reports if NTC staff are further removed from SCS field personnel. Moreover, conservation research will be severely hampered as the exchange of information between university, Agricultural Research Service, and SCS staff is essentially eliminated. The loss to the 12 Midwestern states served by the Lincoln office will be immeasurable, as engineers, hydrologists, geologists, soil scientists, economists, biologists, agronomists, plant materials and range specialists, landscape architects, and computer specialists leave the area.

I can see the wisdom of consolidation efforts that save costs, but I am not sure that cost savings in this case, if any, demand that we proceed without assessing the loss of benefits. There are a number of good reasons for maintaining the technical center in Lincoln. The relocation will only diminish the services available to Nebraska and other midwestern states and jeopardize the close working relationships that currently exist between SCS and the 12 Agricultural Experiment Stations located in the region.

A second matter I would like to bring to your attention is a section of the 1985 farm bill that authorizes the Secretary of Agriculture to provide special grants for education and counseling programs to develop job skills for farmers who have been forced to leave their land.

Nebraska has had tremendous success in assisting displaced farmers with its "Agriculture In Transition" program. This program has helped farm families cope with the mental anguish and stress of losing not only their livelihood, but their lifestyle as well. Through services such as financial and crisis management, job-seeking skills training, and educational workshops in legal services, over 300 rural Nebraskans are learning new skills this year, while 600 farms are benefitting from the financial evaluation program. I strongly endorse this fine program, and I urge the subcommittee to fund such programs in Nebraska and other agricultural states with high rural unemployment.

I have a number of recommendations for funding of various agricultural programs. In my judgment, the President's proposed budget places an unfair amount of the total deficit reduction on agriculture. Although I strongly believe this nation needs to work toward balancing the budget, I don't think any portion of the economy should have to shoulder an undue share of the burden.

The agricultural economy, Mr. Chairman, is undergoing the greatest financial stress in over 50 years. For the President to come to Congress with a budget proposal that calls for agricultural programs to make up 25 percent of the total deficit reduction, when USDA programs only account for 5.5 percent of the budget, is patently unfair, and a gross disservice to our Nation's farmers.

Agricultural credit is an issue that will not go away by spending less. With the availability of agricultural credit a serious problem in 1986, I don't believe that outlays in FY 1987 for Farmers Home Administration direct loans can be 34 percent lower, and outlays for guaranteed loans 22.9 percent lower. The President's proposed budget is only understandable if our agricultural policy is one of eliminating farmers.

Substantial funding reductions are proposed for the Cooperative Extension Service, Soil and Water Conservation Service, Rural Electrification Administration, Fedral Crop Insurance Corporation, Animal and Plant Health Inspection Service, child nutrition programs, and export market development and research.

The Cooperative Extension Service programs have contributed to making U.S. agriculture a remarkably productive and efficient industry. The President's proposed budget, which calls for a 58 percent cut in funding for the activities of the Cooperative Extension Service, would effectively eliminate many of the informational benefits that have made our agriculture a modern, high-technology industry. For Nebraska, monies earmarked for projects and formula programs to the state will be dramatically reduced from the current funding level of $5 million. Nebraska extension service absorbed a 3 percent state budget cut in 1986.

I am particularly concerned with the Smith-Lever section 3(b) and 3(c) funds. At a time when rural America is facing unusual financial stress and economic uncertainty, the Cooperative Extension System can provide needed assistance and education in agriculture and natural resources, 4-H youth and volunteer development, home economics, and community resource development. The dollars invested in this unique federal, state, and county partnership are returned many times over in terms of improved economic performance, improved quality of life, and reduction in environmental degradation.

Integrated pest management projects have played a vital role in synthesizing research in pest management technology and delivery to farmers and the agribusines industry. The elimination of these programs would seriously impair the ability to attack mounting problems related to pest management.

Expanded efforts are needed to address both the short term and long term need of farm operators. The short term needs include expansion of computer-assisted farm financial analyses, statewide hotline services, and cooperative efforts with lenders and other public agencies. Continuation and expansion of these services are of crucial importance to an increasing number of families on farms and in rural communities. In the long term, dynamic changes are needed to improve the profitability of farming and, at the same time, increase agriculture's competitiveness in the marketplace. Adequate funding for farm financial management/agricultural competitiveness programs is essential for farmers to make it through these difficult times and be competitive in international markets.

The Nation's water resources are being adversely affected by man's activities, including the intrusion into groundwater of agricultural chemicals. Even with concerted monitoring, the extent of water contamination will not be adequately assessed in the near future, nor will be the relative effect of agricultural and other sources of chemicals. Because institutional arrangements for water allocation and protection are only in their infancy, efforts must be made to ensure the future of our high quality water supplies. I urge you to consider funding a water quality and management program to develop and implement educational programs for agricultural producers, local governments, and the public.

In connection with the budget for the Cooperative Extension Service, I support the recommendations of the National Association of State Universities and Land-Grant Colleges.

Although the overall costs of erosion in the United States are tremendous, with annual costs of erosion due to water estimated at over $2.6 billion and erosion due to wind estimated at well over $500 million, the President's proposal calls for over $200 million in rescissions and a termination of existing soil and water conservation programs. I am especially troubled by the proposed rescission of cost-share funds for the Agricultural Conservation Program, the Great Plains Conservation Program, and the Small Watershed Program. These programs are vital to our Nation's conservation efforts and should complement the conservation reserve program contained in the 1985 farm bill. In that regard, we need to ensure that sufficient funds are made available to properly implement the 45-million acre conservation reserve.

Under the President's proposed budget, rural electrification and telephone programs would be phased out by 1990. Funding for these programs would be reduced from $2 billion in 1986 to $800 million in 1987.

The Rural Electrification Administration programs are of vital importance to Nebraska. Without the credit assistance provided under the REA programs, many of the sparsely-populated areas of Nebraska would be without dependable electric and telephone service.

Without viable REA programs, for many rural utilities there would be no investment for the future and utility rates would be increased to prohibitively high levels. In addition, without viable REA programs, high quality affordable electric and telephone service would once again become a luxury not available to our rural citizens.

The President's 1987 budget calls for a phase out of the Federal Crop Insurance Corporation (FCIC) over the next five years. Between FY 1986 and FY 1987, the proposal reduces outlays for crop insurance by 57.6 percent. User fees would be imposed with farmers paying potentially increasing premiums. In my judgment, Congress should take no action that would adversely affect the availability of crop insurance to our Nation's farmers.

With respect to the Animal and Plant Health Inspection Program, I believe that Federal funding must be made available to ensure the proper functioning of the meat and poultry inspection program. Mandatory inspection paid with tax revenues promotes food safety and ensures consumer confidence.

The President's budget request for child nutrition programs includes several proposals to achieve spending reductions of $775 million below the FY 1987 current law estimate. The major legislative proposal is the elimination of cash and commodity subsidies for meals served to children from families with incomes exceeding 185 percent of the poverty level who participate in the School Lunch, School Breakfast, and Child Care Food Programs. I share the concerns of my constituents who believe that funding for the child nutrition programs should be maintained at a level that is no less than the fiscal year 1986 level.

Commodity groups are extremely concerned about the status of government matching funds for research and export market development efforts. Overseas projects have increased farmer income, while laying the groundwork for expanding international markets. I urge the subcommittee to maintain the 1986 level of funding for these programs through USDA's Foreign Agricultural Service.

Mr. Chairman, I look forward to working with you in developing a viable and adequate budget for agriculture.

## STATEMENT OF JAIME B. FUSTER, RESIDENT COMMISSIONER OF PUERTO RICO

I submit to you a statement on behalf of the 3.5 million American citizens who live in Puerto Rico, whom I represent in the U.S. Congress, to request your support for the budgetary recomendations approved last February by the House Interior and Insular Affairs Committee and the House Agriculture Committee regarding Nutrition Assistance to Puerto Rico, which were also essentially approved by the Senate in its recent Budget Resolution for FY 87. To put such recomendations in perspective, let me briefly review the history of P.R.'s Nutrition Assistance Program (NAP).

In FY 1982 Puerto Rico was taken out of the national Food Stamp Program and was granted a special nutritional assistance block grant at a funding level 25% below what the island was receiving then. At that time, Puerto Rico had to remove approximately 100,000 needy families from the island's assistance rolls in order to adjust to the substantial reduction in funding. Puerto Rico also had to decrease the amount of aid provided to the very needy that remained in the assistance rolls. Thus, while an indigent family of four in the mainland can get maximum monthly benefits of $264, and qualify for assistance even with an income as high as $13,260 a year, an island family of four only gets an averge of $165 a year and it qualifies for no aid if its income exceeds $8,000 a year.

Puerto Rico accepted this huge and unfair reduction in nutrition assistance funds in part because it seemed at that time that the amount of the block grant was minimally fixed and the needy U.S. citizens in Puerto Rico could count on it with certainty.

For five fiscal years after its establishment, from 1982-1986, the Puerto Rico Nutrition Assistance Program was not granted any increase for inflation, despite the fact that food costs in Puerto Rico are higher than those in the mainland and despite the fact that such higher food costs grew annually all those years at a rate that was also higher than that of the mainland. As if the substantial reduction in funds ordered in 1981 had not been enough, the NAP legislation never provided for cost of living adjustments, even though such COLA'S did exist for the National Food Stamp Program.

Puerto Rico indeed had been treated to a double whammy and over five years the accumulated increase in food costs have substantially diminished the buying power of an already substantially reduced nutrition assistance program. If the reduced block grant remains frozen, it will provide 41% less for food purchases in FY '87 than what the Puerto Rican needy would have obtained if Puerto Rican participation in the National Food Stamp Program had not been replaced in 1982 with the capped and unadjusted block grant.

This gross inequity was made even more unfair just last December when Congress at the last hour enacted P.L. 99-190 imposing a 0.6% cut on the NAP block grant, reducing it to $820.0 million. This has led to an inmediate readjustment by which those families receiving an average of $165 a month for their food needs received $6.35 less the first month the readjustment began to be implemented. Needless to say, to families living in extreme penury, such reductions are major hurdles that prevent an adequate nutrition and a standard of living that can assure them some dignity.

In assessing the fairness of our claim, it is necessary to keep in mind that after an 88-year long legal relationship between the island and the mainland, and despite substantial economic development, particularly during the 1950's and the 60's, U.S. citizens in Puerto Rico still remain the poorest group within the American population. Per capita personal income is far below mainland levels, amounting to one third of the level for the U.S. generally and to half the level of the poorest of the 50 states. Mean family income for all the families in Puerto Rico is only slightly above the U.S. poverty level. Unemployment in Puerto Rico has remained over 15% since 1975 and has been over 20% since 1982, recently going up as high as 24%. Approximately half of the families participating in the food nutrition program in 1984 had a total income of $2,000 or less. Economic growth since the early '70's has been nearly null and net out migration from Puerto Rico to the mainland has been growing steadily over the last decade and a half.

In spite of the very dire economic circumstances of the island, Puerto Rico does not participate at all in several major federal assistance programs, such as General Revenue Sharing and the

Supplemental Security Income; and participates only to a limited extent in various important federal programs for the needy such as AFDC, Medicaid, Medicare, and others. These exclusions are particularly unfortunate because those in poverty in the island disproportionately comprise the elderly, children under 18, and single-parent female-headed families.

The bottom line is that the poor Americans who live in Puerto Rico not only get food assistance that is grossly inadequate to meet their nutritional needs but that they also suffer discrimination that other poor Americans in the mainland do not experience. In these circumstances it would really be inexcusable to increase their burden by keeping the Puerto Rico Nutritional Assistance Program (NAP) frozen. I urge your Subcommittee to support a restoration of the 1986 funding level to what it was in 1985 and urge the appropriation of the funding levels called for and enacted into law with the passage of the Food Security Act of 1985. That act provides for a modest 3% increase in the block grant to partially offset the reductions in buying power suffered by NAP due to inflation.

On behalf of the poorest of the poor in the Nation, I request your support for these petitions, that already have substantial backing in the U.S. House of Representatives and which were essentially accepted by the Senate's own Budget Committee and by the whole of the Senate in the recently approved Senate Budget Resolution for FY '87.

Thank you.

## STATEMENT OF THE AMERICAN DRY PEA AND LENTIL ASSOCIATION

### ARS 6-Year Implementation Plan
### Basic versus Applied

The present ARS directive concerning change in direction of research from Applied to Basic was put into effect on January 1, 1984. Information provided so far indicates that some programs will have a total change of direction in objectives. While the industry can live with some change in direction between Basic and Applied, we are deeply concerned and cannot afford to see development and release of new varieties seriously curtailed or eliminated in the Pacific Northwest.

### Effect on Overall Seed Improvement Program

It has taken more than 30 years of effort to develop a sound certified seed program in the Pacific Northwest. Non-profit crop improvement organizations have been very effective in promoting sound seed certification programs. They have assumed the responsibility of increasing Breeder seed so that Foundation seed is distributed at a fair price which gives all farmers the opportunity to grow new varieties. It has been so successful that most farmers now plant registered and certified seed for commercial production. It has taken a long time to develop a certification system and organization which now provides a valuable and affordable service to farmers and processors in this area. In order for this program to have continued success, there must be new varieties of wheat, barley, peas, lentils and other legumes available to the agricultural industry on a regular basis.

### Will Private Industry Provide New Varieties of Wheat, Barley, Peas, Lentils, and other Legumes?

The argument presented for justification of change in ARS direction is that private industry or the Experiment stations will take over the varietal development program.

It should be pointed out that the commodities affected are completely different from industries such as the corn industry. The corn industry has a successful hybrid seed program which makes it very attractive for development of private seed companies. There is currently a large market for commercial wheat seed in Washington, Oregon and Idaho. If money could be made using patented wheat varieties, we would see many patented wheat varieties available today. The fact is that even with the patent laws we have today, it is almost impossible to control the seed once it is put out to farmers. Without a hybrid seed program there is very little incentive to get a fair return on the investment needed by a private seed firm to develop and release new varieties.

The agricultural industry is concerned that private industry will not be able to adapt rapidly enough to meet the needs of agriculture in the areas of plant breeding and adequate testing of new varieties. It is not unrealistic to conclude that private companies will not be able to provide the new varieties required by the wheat, barley, pea, lentil and other legume industries in the Pacific Northwest in order to remain competitive in today's markets.

Can the State Experiment Stations Provide New Varieties?

If the State Experiment stations could take over the varietal development programs now being conducted by ARS, there would be no problem created by the new directive. The present cooperative system has evolved over a long period of time with the experiment stations providing the facilities and ARS providing the scientists. These scientists have done an excellent job of providing new and better varieties of wheat, barley, peas, lentils, and other legumes for production and marketing needs of the agricultural industry. It has been an excellent working relationship which has benefited all parties.

It is unlikely that the Experiment stations will be in a position to assume the responsibility of varietal development that has formerly been provided by ARS. The reason being that this would involve setting up completely new programs. State land grant institutions of the Pacific Northwest are no different than other land grant institutions in the U.S. in that state legislatures are hesitant to increase research budgets. During the past few years research budgets have actually been reduced, and the likelihood of increased funding under the present tax structure is doubtful. The prospect of state legislatures funding the addition in one or more scientists at an estimated cost of $150,000 per man is not encouraging, to say the least.

Even if the state legislatures were able to find the funds at some time in the future, there would probably be a five to six-year gap in variety releases - which the agricultural community can ill afford.

Plant diseases are the primary reasons that varieties become non-productive, therefore the critical need for periodic replacement. We must have new varieties on the average of every two years in order for farmers to remain in business.

## Commodity Groups Can Not Provide Total Funding for Varietal Development

Most commodity groups are currently assessing themselves a tax under a check-off program. A major portion of these funds are currently contributed to state and federal research programs to supplement the present varietal development programs. Even though commodity groups contribute a sizeable amount of funds to these programs, they do not have the funds available to take over these programs.

The industry can live with some change in direction of research by ARS, but we can not afford to have Applied research in our area seriously curtailed or completely eliminated.

What we need is some assurance that the varietal development programs in the Pacific Northwest will not be eliminated under the proposed new directive program. We believe there are sufficiently valid reasons for keeping a balance in these programs in our area.

The following organizations fully support this statement in principle.

North Idaho Foundation Seed Association
American Dry Pea and Lentil Association
Washington Association of Dry Pea and Lentil Producers
Idaho Association of Pea and Lentil Producers
Washington Dry Pea and Lentil Commission
Idaho Pea and Lentil Commission
Washington State Crop Improvement Association
Idaho Wheat Growers Association
Washington Bean Dealers Association
Idaho Wheat Commission
Idaho Crop Improvement Association
Oregon Wheat League
Oregon Wheat Commission

## STATEMENT OF ROBERT J. GRAY, SENIOR ASSOCIATE/POLICY DEVELOPMENT, AMERICAN FARMLAND TRUST

I appreciate the opportunity to submit written testimony to the Senate Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies.

The American Farmland Trust (AFT) is a private nonprofit organization concerned with land conservation issues. AFT provides technical assistance to state and local governments on conservation problems and also works with individual landowners who are interested in placing conservation easements on their land. In addition, AFT has an extensive public education program to raise public awareness of the need to conserve land resources -- particularly our prime agricultural land. AFT currently has more than 35,000 members nationwide.

Most recently AFT undertook an extensive analysis of our Federal Soil Conservation Programs. Our final report "Soil Conservation in America: What Do We Have to Lose?" made a series of recommendations for changes in national soil conservation policy. With your leadership and support most of these recommendations were incorporated in the 1985 Farm Bill.

My purpose in submitting testimony is to urge your support of ATTRA, Appropriate Technology Transfer for Rural Areas, under USDA grant authority at a level of $1.8 million for FY 1987. My experience in working with farmers, local elected officials and citizens in rural communities over the last several years has shown how important technology transfer is in assisting communities to more effectively manage their natural resources.

AFT has conducted a number of analyses on resource issues including: soil conservation, density related public costs (residential development at various densities) and utilizing computer based Geographic Information Systems to make natural resource policy decisions. In addition, AFT is currently undertaking an off-site damage assessment project to analyze and calculate the off-site damages caused by soil erosion.

Many other private nonprofit organizations undertake similar analyses on other related issues. It is extremely important that the kind of information developed by the private sector as well as governmental agencies be given the widest possible distribution. ATTRA could provide this kind of service by developing a nationwide network of individuals throughout the country to disseminate information that would prove beneficial to resource management at the local level.

This kind of function would certainly not duplicate the services provided by cooperative extension but would compliment them by bringing in other information that does not reach into the extension network and by providing other options to rural communities that many are not aware of. In addition, ATTRA could serve a very useful role in performing analysis of Federal programs such as the new conservation reserve program. Also, the conservation easement program as established by the 1985 Farm Bill to allow farmers to reduce indebtedness to Farmers Home Administration by placing conservation easements on highly erodible cropland or wetlands could be assisted greatly through ATTRA's efforts.

Therefore I strongly urge that ATTRA be funded for FY 1987. ATTRA already has a facility available in Shelby County, Tennessee, at Agricenter International. It is literally ready to "hit the ground running."

## STATEMENT OF GLENN GIBSON, PRESIDENT, AMERICAN HONEY PRODUCERS ASSOCIATION

I am Glenn Gibson, President of the American Honey Producers Association, a nation-wide organization of honey producers and/or beekeepers. We have members in 41 states. Our group is the only nation-wide honey industry organization where the voting privileges are limited to producers only. Non-producers are welcome, but they are not permitted to vote.

WE APPRECIATE THIS OPPORTUNITY TO MAKE RECOMMENDATIONS FOR BEE RESEARCH FUNDING.

### STATISTICAL ESTIMATES

For the Subcommittee's information over 210,000 beekeepers who produce honey, beeswax and offer pollination services to other segments of agriculture are divided into three groups:

200,000 hobbyists, owning less than 25 colonies, or beehives;
10,000 sideliners, owning 25 to 300 colonies, or beehives; and
1,700 commercial, owning 300 or more colonies.

Total ownership in the U.S. is currently estimated to be 4.2 million colonies. Hobbyists and sideliners own 50 percent of the nations beehives and produce 40 percent of the honey (15 percent for hobbyists and 25 percent for sideliners). Commercial beekeepers own the balance and produce 60 percent of the honey.

Hobbyist beekeepers, especially those with a few colonies, usually do not sell commercially. Instead, their production goes for home use and gifts for friends and relatives.

Sideline and commercial beekeepers market their production in several ways. Some pack and distribute their honey to neighboring grocery stores and operate retail outlets -- such as roadside stands. Most of the country's domestic production is sold to packers who in turn distribute to the food trade. Our average annual production has hovered around 200 million pounds. However, the 1984 and 1985 crops were well below the average.

### FEDERAL BEE RESEARCH

The Agricultural Research Service, USDA, funds bee research in six field laboratories:

| | |
|---|---|
| Tucson, Arizona | Baton Rouge, Louisiana |
| Beltsville, Maryland | Madison, Wisconsin |
| Weslaco, Texas | Logan, Utah |
| Stillwater, Oklahoma | |

The total budget for these studies is approximately $3 million.

The Department of Agriculture recommends the continuation of the present programs a the approximate same level of funding with 2 exceptions:

- The research activities at Stillwater, Oklahoma will be terminated.
- The Madison, Wisconsin laboratory will be closed.

We agree with the decision to close the Stillwater activities, but do not concur with the Madison decision.

CLOSING MADISON???

The honey industry will suffer in the coming years if the Madison lab is closed. If the Department's decision prevails, all bee labs, will be located in the South. This might be a proper decision for work that will be needed on the pest invasion from the South (Mites), but what will we do when these pests become established in all parts of the country? Big laboratories may appear more efficient to the Administration, but too often the people in it are driven in one direction by the leader. We doubt that closing Madison will result in saving of funds.

A NEW BEE RESEARCH PROJECT

We hesitate to mention new projects since this usually calls for additional funding. However, in this case, we suggest that the Department examine ongoing projects and seriously consider a study that would revise and update all statistical data relative to honey production, pollination (paid-free to wildlife, agriculture, home gardens and orchards), imports, etc.

The need for better data has been brought forcibly to our attention these last 4 years when a mountain of misinformation was circulated up and down the halls of Congress. As a result of this, a number in Congress view the beekeeper as a subsidy hog who will be plagued with Africanized bees sometime in the near future. The recent report of the General Accounting Office on the Honey Price Support Program is a good example of an agency's attempt to make a factual and coherent report with a scanty source of data. Fortunately for us, members of the Committees on Agriculture understood our problem. Commenting on the GAO report Congressman Kika De La Garza told the House:

> "Yes, I have read the GAO report. It is not as factual as it could be. It deals in a vacuum. I found arguments that I could challenge in some areas of the GAO report...."
> Congressional Record 10/7/85.

This study would clear up the pollination story and accurately establish the value of our industry to other segments of agriculture and the environment.

OUR RECOMMENDATIONS

1. Keep the Madison lab open.
2. Allot funds for the Varroa mite study in Brazil
3. Approve a new research project that would update the industry's statistics.

Please give these items your serious attention.

## STATEMENT OF C. MANLY MOLPUS, PRESIDENT, AMERICAN MEAT INSTITUTE

The meat and poultry industries are facing an intolerable situation due to the inability of the Food Safety and Inspection Service to provide inspection services to new or expanding meat and poultry plants. FSIS has indicated that within its current budget it cannot provide mandated inspection services to these facilities as required by the Federal Meat Inspection Act and the Poultry Products Inspection Act.

Millions of dollars are now being invested in new plants and equipment to expand and modernize existing facilities. These capital investments will sit idle unless federal inspection is granted. Livestock and poultry producers will be deprived of additional markets and more importantly thousands of jobs in economically hard hit farming areas will go unfilled.

We urge that during the Agricultural Appropriations Subcommittee hearing scheduled for April 16, at 9:30 am, to discuss the FSIS 1987 fiscal year budget that you fully explore this situation with Dr. Donald Houston, Administrator of the Food Safety and Inspection Service (FSIS) and that together you seek a resolution to this budgeting situation.

Your action will help to assure a coordinated effort by both the Administration and the Congress in resolving a problem created by the conflicting policy objectives of mandating meat and poultry inspection and reducing federal spending.

It is inconceivable that the federal government wants the private sector to idle millions of dollars worth of plants and equipment, prevent the hiring of thousands of workers to staff these facilities, and deny additional markets to livestock and poultry producers. Under the current budget constraints given the agency the government seems to be saying just that.

Since the Administrator of FSIS is required to carry out a meat and poultry inspection program the government should either provide him with the necessary resources to carry out such a program or the flexibility to devise an inspection system that can be operated within the approved budget.

The quick resolution of this matter is critical to the well being of our industries. AMI and its member companies urge your immediate attention to this problem.

Regards,

C. Manly Molpus
President

## STATEMENT ON THE INSPECTION CRISIS

Presented April 14, 1986

To Packers and Processors At A Regional Meeting

Omaha, NE

A major crisis faces the meat industry and the Department of Agriculture. Unless dramatic changes are made soon, the Food

Safety and Inspection Service will be unable to carry out its legal mandate to provide inspection to new or expanded plants.

Recently, a number of companies requesting inspection for new or expanded plant facilities have been told that the needed inspection will not or may not be available. This discouraging fact of life comes despite industry's successful effort to avoid a seven-hour work day that FSIS originally proposed to meet federal budget restrictions.

Since a plant cannot operate without inspection, a very bleak picture of the future has emerged. New plants and equipment, representing millions of dollars in capital investments, may be forced into idleness; thousands of jobs in the economically depressed farm sector may be lost; and livestock producers will lose these additional and much needed plant facilities as markets for their animals.

And we must not overlook the consumer. If our industry is unable to produce products at the most efficient and economical levels, consumers will find a less plentiful and more expensive meat supply in their supermarket meat counters.

This situation -- idle plants and lost jobs -- is unacceptable and intolerable. Conflicting public policy goals of budget cuts on the one hand and mandated inspection on the other must be resolved.

Today, the American Meat Institute sent telegrams to the director of the Office of Management and Budget, the secretary of agriculture and leaders of key congressional committees with oversight over the meat inspection law and funding for this public health program.

It is impossible to calculate what the meat industry, livestock producers, industry employees and potential employees stand to lose if this problem is not resolved immediately.

The uncertainty surrounding the inspection program has left meat industry executives in a quandry. No company can plan for the future knowing that the possibility exists that inspection will not be available to staff expanded and modernized facilities.

We have urged the administration and the appropriate responsible committees of Congress cooperatively to resolve the policy conflicts that have created this illogical and unprecedented situation. AMI stands ready to assist in this effort.

MEAT PLANTS DENIED FEDERAL MEAT INSPECTION

| | |
|---|---|
| Company | IBP, inc. |
| Location | Columbus Junction, Iowa |
| Number of Employees | 500 in August; 1,000 in a year |
| Lost Payroll to Community | $830,000 per month;<br>$1.7 million per month in a year |
| Lost Revenue Per Month | $37.5 million |
| Hogs Slaughtered Per Day | Eventually 12,000-13,000 per day |
| Date plant to open | August 1986 |

| | |
|---|---|
| Company | IBP, inc. |
| Location | Council Bluffs, Iowa |
| Number of Employees | 350 (to increase to 450) |
| Lost Payroll to Community | $667,000 per month |
| Lost Revenue Per Month | $2 million |
| Hogs Slaughtered Per Day | Eventually 5,000-6,500 per day |
| Date plant to open | June 15, 1986 |

| | |
|---|---|
| Company | Webber Farms, Inc. |
| Location | Cynthiana, KY |
| Number of Employees | 20 now; 200 in a year |
| Lost Payroll to Community | $34,000 per month now;<br>$340,000 per month in a year |
| Lost Revenue Per Month | $1.2 million |
| Date second shift to start | April 1986 |

| | |
|---|---|
| Company | Swift Independent Packing Company |
| Location | Dumas, Texas |
| Number of Employees | 175 |
| Lost Payroll to Community | $291,000 per month |
| Lost Revenue Per Month | $27.5 million |
| Cattle Slaughtered Per Day | 7,600 |
| Date plant to open | Undetermined |

| | |
|---|---|
| Company | Handy Packing |
| Location | San Antonio, Texas |
| Number of Employees | 25 |
| Lost Payroll to Community | $41,000 per month |
| Lost Revenue Per Month | $2.2 million |
| Hogs Slaughtered Per Day | 200 |
| Date plant to open | Undetermined |

## STATEMENT OF DAVID R. LAMBERT, ASSISTANT TO THE EXECUTIVE VICE PRESIDENT, LEGISLATIVE AND REGULATORY AFFAIRS, AMERICAN SEED TRADE ASSOCIATION

Mr. Chairman, I am David R. Lambert, Assistant to the Executive Vice President - Legislative and Regulatory Affairs, American Seed Trade Association. Thank you for this opportunity to appear before your Committee and express the views of our Association relative to funding of the Federal Seed Act Programs.

The American Seed Trade Association membership includes 600 firms who produce and market seed for planting. We have an additional 200 Affiliate and Associate members whose activities are closely related to the seed industry.

The Federal Seed Act, enacted in 1939, is a "truth-in-labeling" law for the sale of seed in interstate commerce. After several years of consideration as to the need and effectiveness of the Act and prompted by the need to control federal budgets and reduce deficits, USDA is considering repeal of the Act. This is reflected in an absence of funding for the program in the Administration's FY 87 Budget.

Federal deficits must be reduced. Difficult choices must be made to restore fiscal responsibility to our federal budget. The Federal Seed Act (and its attendant budget -- under $1 million) is a small program. However, given the magnitude and pervasive nature of the deficit problem, all programs, large and small, must be critically examined and clearly justified on the basis of demonstrated public benefit versus cost. After careful consideration of the issues involved, it is ASTA's conclusion that the Federal Seed Act does not withstand such scrutiny and cost/benefit analyses.

For the following reasons, the American Seed Trade Association (ASTA) believes the Act does not provide public benefits commensurate with its cost and supports an initiative that the Act be repealed:

- All 50 states now have their own seed laws, many of which were enacted after 1939. Interstate shippers must comply with state labeling laws; state laws thus are the controlling laws for both intra and interstate commerce.
- States have powerful regulatory tools in place and available to them. Many states do not rely on the Act to assist in their regulatory activities. The Act has primarily served the wishes of a few.
- The Act does not serve to promote recommendations for changes in state laws. It does not serve as a strong influence for uniformity in state laws. Recommendations for progressive changes to and uniformity of state seed laws can best be achieved through the Recommended Uniform State Seed Law.
- The Act's requirements related to imported seed serve no useful purpose; some provisions amount to non-tariff trade barriers. Other provisions are antiquated or duplicative of state or other federal statutes.
- Three independent studies commissioned by USDA in recent years point out serious questions as to the need and effectiveness of the Federal Seed Act.

There are, however, certain provisions and principles related to the federal seed program which must be preserved. It is ASTA's belief that these can be accomplished, without cost to the federal government, by simple transfer of authority to other appropriate existing laws (such as the Agricultural Marketing Act).

National and international commerce of seeds demand preservation of the existing U.S. program for seed certification. This program is authorized by the Act and by its "Certified Seed Regulations." The program is administered by the Association of Official Seed Certifying Agencies (AOSCA) under a cooperative agreement with USDA. AOSCA promulgates minimum standards which must be followed by all certifying agencies and has a long-established self-regulation program.

Federal involvement and cost have been very nominal and can be reduced to zero or essentially so, provided that rules promulgated by AOSCA are automatically recognized by USDA and USDA's role is limited to monitoring. Except for "red tape" and costs to later promulgate AOSCA rules as USDA rules, this is in fact how the program now operates.

The Act contains certain definitions and provisions on sampling and testing of seed. The "Seed Testing Regulations" promulgated under the Act detail specific instructions for testing of seed for different components of quality and tables of (statistical) tolerances (which for example are used for enforcement purposes to compare test results to that labeled).

The Act and its Regulations for sampling and testing of seed are not needed. They are duplicative of the work and rules promulgated first by the Association of Official Seed Analysts (AOSA). AOSA rules serve as a basis for changes to the Act's rules.

It is important that the U.S. has official rules for sampling and testing of seed. This can be accomplished under the Agricultural Marketing Act or similar law by automatic recognition of AOSA rules and procedures as official U.S. rules. Many states now give automatic recognition of AOSA rules for sampling and testing of seed.

## State Seed Laws

All fifty states have seed laws which regulate labeling of seed offered for sale in their state.

Interstate shippers must label according to the laws of the states into which they sell seed, not simply to comply with the Federal Seed Act. State laws are thus the controlling laws which regulate interstate commerce.

These laws typically prohibit the sale or offering for sale of seed not accurately labeled as to kind or variety, purity and germination. They also require detailed records of seed purchases and sales, among other requirements.

Nonconforming seed may be the subject of "stop sale" orders banning their sale within the state. States may also seek court injunctions and criminal penalties.

Existing "long arm" statutes, believed to be in force in every state, give a state's courts civil jurisdiction over nonresidents who engage in specific activities within the state including "transacting business" of any kind.

The Federal Seed Act largely parallels the state seed laws. Despite the existence of a federal enforcement staff within the U.S. Department of Agriculture, virtually all federal enforcement actions stem from complaints referred by state enforcement officials, principally in a small number of states. It is understood that approximately 40% of states routinely refer no complaints to Washington and that most of the complaints come from a handful of states.

However, in the rare case that the nonresident seed labeler does not cooperate and the violation is important enough to pursue even in the absence of any local inventory which can be reached by a stop sale order, the state can refer a complaint to its attorney general or other enforcement unit to seek a court injunction. Service of process can typically be made on the state's secretary of state, relying for jurisdiction on the seedsman's "transaction of business" in the state under the "long arm" statute believed to be in force in every state.

Then, unless the seedsman appears and successfully defends against the complaint, a court can be expected to grant a permanent injunction against future seed law violations. Any such future violations can then be summarily enforced through "civil contempt" proceedings with resulting civil penalties -- traditionally a powerful regulatory enforcement weapon in other industries, but one wich has rarely been found necessary in seed law enforcement.

Other more stringent enforcement tools can be enacted of future experience warrants, notably civil penalty provisions, and dealer licensing provisions such as those already in effect in some states. ASTA believes, however, that these are unnecessary based on the general experience at both the federal and state levels with voluntary compliance by seedsmen.

## Conclusion

ASTA believes that existing state laws provide ample enforcement powers with which seedsmen can be expected to cooperate in the future as they have in the past. Repeal of the Federal Seed Act will at most, we believe, have the effect of removing a crutch that has been relied on by only a few states, as a substitute for vigorous local seed law enforcement.

Mr. Chairman, again I thank you for this chance to present the views of the seed industry relative to eliminating the funding for Federal Seed Act Programs.

## STATEMENT OF MOSELIO SCHAECHTER, PH.D., PRESIDENT, AMERICAN SOCIETY FOR MICROBIOLOGY

The American Society for Microbiology (ASM) wishes to submit for your consideration the following comments on the Fiscal Year (FY) 1987 basic research budget for the U.S. Department of Agriculture (USDA).

The ASM is the largest single biological life science organization in the world with an active membership of over 34,000. Many of these individuals are engaged in agricultural research and are recipients of awards administered by the USDA. Our comments are directed primarily to the Competitive Research Grants program and the initiative in biotechnology within the Agricultural Research Service (ARS), increased support for training and the Administration's proposed termination of support for the animal welfare inspection program in the Animal and Plant Inspection Service (APHIS) of the USDA.

The ASM is encouraged by the USDA's initiative in biotechnology within the Competitive Research Grants program and the ARS. We believe that the direction the Agency is taking will benefit agriculture in the United States and will aid in maintaining the preeminent position the U.S. enjoys on a global basis. In our opinion, research related to agriculture is as essential to the economic and social well-being of the United States as other areas of research which have consistently received strong federal support, namely defense and health.

The ASM strongly urges that mandatory cuts in the USDA's research budget be allowed to be made at research management discretion as opposed to across-the-board cuts. Across-the-board research budget reductions have several negative impacts on research programs: 1) across-the-board cuts deny funds to both good and poor programs, thus denying resource rewards to the best research; 2) they preclude management decisions in establishing priorities for research, thus ability of programs to be responsive to the stated needs of the users of agricultural research findings; 3) across-the-board cuts are particularly detrimental to new research initiatives in biotechnology and bioregulation. These new programs will suffer from elimination of salary lines held by young scientists, newly trained in the cutting edge of technologies who are in the most productive phase of their careers; and 4) managers who implement across-the-board reductions protect salaries first; cuts are taken preferentially in support staff, equipment and operating supplies. This is devastating to molecular level research because modern technologies require high support to salary ratios.

The ASM believes that indiscriminate budget cutting could result in the unfortunate and irresponsible sacrifice of the measurable gains in biotechnology that have been made by the USDA. Although the ASM fully appreciates the need for fiscal restraint in the FY 1987 budget, we are deeply concerned that the level of funding requested by the Administration for Competitive Research Grants will not fulfill the objectives of the program in a timely and efficient manner.

The USDA has consistently lagged behind other agencies in funding research. A large number of worthwhile projects are not being funded. The proposals that are funded are at a comparatively low level. Research in biotechnology and the biological sciences is costly. It demands well-trained scientists, support personnel to utilize the time of these scientists efficiently, expendable items and expensive state-of-the-art instrumentation. Basic research with eventual application to agriculture costs the same on a per project basis as research performed on biological systems when applied to health (National Institutes of Health) or fundamental biological science (National Science Foundation). During FY 1985, the last year for which data are available, a USDA-funded scientist, was expected to perform research in the area of agriculture with an award that averaged $51,300 per year (Table 1 and Table 2). A history of the funding practices within the USDA for the past seven years is described in Table 2. The USDA has consistently lagged behind the other federal agencies in its annual award rate (Table 1 and Table 3). In comparison, grants awarded in 1985 by the National Science Foundation (NSF) averaged $67,600 per year and grants awarded by the National Institutes of Health (NIH) averaged $147,000 per year (Table 1).

Although the ASM is encouraged by the moderate increase in the average annual grant awarded by the USDA in FY 1985, ($51,300 as compared to $35,200 in FY

1984) it is deeply concerned about the lack of funds in the program. The level precluded the funding of a large number of worthwhile research proposals. Only 8.9% of the requested amounts in the Competitive Research Grants program were funded in FY 1985 as compared to 10.6 % in FY 1984 (Table 2). Also, the percentage of proposals resulting in grants decreased from 25.7 % in FY 1984 to 19.4 % in FY 1985. If the USDA levels are compared to the NSF (37.7%) and NIH (37.3%) levels (Table 1), it is obvious that in 1985 scientists working in agriculture who applied for USDA funds were 50% as likely to be funded as their counterparts who applied for funds from NSF or NIH. It has been estimated that the grant applications to the USDA Competitive Grants program in FY 1986 have decreased by about 20%. This is a solid indicator that the aim of the Competitive Grants program, which is to bring basic researchers into agriculture, has been compromised. Apparently, researchers do not find it efficient to apply for grants that have such a low possibility of funding, a relatively low award level as compared to NSF and NIH, and a shorter duration of the award - two years vs. three to five years. Additionally, the USDA budget in the Competitive Grants area is extremely small when compared with other federal agencies (Table 1). The advances in science expected for agriculture involve biological systems which are much wider in scope than those of the other agencies. A myriad of plants and animals must be included in agricultural research. Numerous studies on the "state-of-the-art" of agriculture have identified that severe knowledge gaps exist in the understanding of agriculturally important plant and animal cells at the molecular level. These deficiencies impede progress. Although the technology exists to move genes from cell to cell, the majority of the genes which should be moved to increase productivity or nutritional quality have not been identified.

The Competitive Grants budget is only $42.4 million in FY 1987. The FY 1987 Competitive Grants budget is $4.4 million less than the FY 1985 budget. In FY 1985, 504 proposals were funded through the Competitive Grants program. It has been estimated that in FY 1985 there were more than 352 proposals (not including the alcohol or forest research programs) that were judged by peer evaluation to have the scientific merit but which were not funded because of insufficient monies to make the awards. If these were funded, the percentage of proposals resulting in grants would be 38%, a level that is commensurate with NSF and NIH. This level of funding would require $161.4 million in the Competitive Grants program (2,592 proposals x 0.38 x $67,600 per year x 3 years). Funding of the Competitive Grants program at $161.4 million would bring the level of funding for agriculture on a par with NSF. This level of funding for a basic understanding of agriculture would cost less than one dollar per capita per year to ensure that the U.S. retains its preeminent position in agriculture and continues to supply its citizens with the most nutritional food at the lowest possible cost.

The Administration has recommended budgetary reductions for Higher Education grant programs ($5.78 million) with no funding requested for Competitive Graduate Training grants. This comes at a time when the number of research trainees is declining and the situation will be worsend by cuts in the research training budget of the USDA. If the annual award rate for Competitive Research Grants does not increase to an appropriate level to permit training assistance, it is not feasible to terminate funding for training grants in the FY 1987 budget. Full funding of the Competitive Grants Program at the level of $161.4 million might eliminate the need for training grants, but funding at lower levels does not. It usually requires that an individual study and conduct research three to five years beyond a BS level to earn a Ph.D. When awards are allotted in the Competitive Grants program, they average two years. These awards terminate in the middle of a doctoral candidate training in his or her research. If a new award is not made in the same area of research, the candidate is devoid of support and often results in the termination of the research project. Even if the candidate obtains some support (teaching assistantship or unrelated job) to compensate for the loss of his or her fellowship ($7,000 to $12,000 per year), it results in an inordinate increase in the time it takes a candidate to earn a Ph.D. This significantly decreases the number of productive years that are devoted to agricultural research.

The Administration has also recommended that the research activity of the Special Grants program ($31.5 million), animal health and disease research ($5.73 million) and Competitive Grants in pest research ($2.9 million) be eliminated. It should be recognized that these proposed cuts ($40.13 million) will also significantly impact the training of individuals in agriculture since these funds support graduate students and postdoctoral fellows. If these programs are eliminated, the monies inherent in the programs for training should be shifted to the Competitive Grants program to ensure that there is an adequate supply of scientists to satisfy the needs of agriculture in the future. The ASM also recommends that if Congress determines it is necessary to restore funding for these programs because it perceives specific problems must be solved in agriculture, that, whenever possible, it direct these funds to research involving the new methodology of biotechnology. This approach would yield innovative solutions to new and old problems that have not been possible in the past. This type of direction would solve specific problems while building a biotechnology base in agriculture which would subsequently be applied to all agricultural needs.

The ASM is seriously concerned that funding for the animal welfare inspection program of APHIS ($4.6 million) is again slated for termination by the Administration. We believe the APHIS animal welfare program is essential for equitable and uniform inspection of animal research facilities and licensed dealerships. Enforcement of the Animal Welfare Act on a national basis is in the best interest of the federal government and the biomedical research needs of its citizens. The ASM strongly supports the assessment of the National Association for Biomedical Research (NABR) that $6.65 million for FY 1987 is the minimum amount required to implement the Animal Welfare Act as recently amended.

The ASM also strongly supports the $14 million initiative within the ARS for Commodity Conversion and Delivery to develop new food and nonfood uses for surplus agricultural commodities. This initiative is especially timely since progress in biotechnology should yield increased productivity of agricultural commodities. This type of effort is essential to balance the dilemma of keeping U.S agriculture preeminent in the use of new technologies while still improving the demand for these products.

We appreciate the opportunity to express our views and stand ready to assist in any way possible during your deliberations on the FY 1987 budget for the USDA research and training budget.

TABLE 1
Comparison of Funding of Biological Research in the
U.S. Department of Agriculture, National Science Foundation
and National Institutes of Health
(FY 1985)

| | USDA[a] | NSF[b] | NIH[c] |
|---|---|---|---|
| Number of proposals | 2,592 | 4,445 | 16,762 |
| Number of grants funded | 504 | 1,675 | 6,246 |
| Percent (%) of proposals resulting in grants | 19.4% | 37.7% | 37.3% |
| Amount requested (dollars in millions) | $578.1 | $1,094.5 | $ 2,233.4 |
| Amount awarded (dollars in millions) | $ 51.7 | $ 113.3 | $ 918.1 |
| Percent (%) of requested amount awarded | 8.9% | 10.35% | 41.1% |
| Average amount of award (dollars in thousands/year) | $ 51.3 | $ 67.6 | $ 147.0 |

[a] USDA - data for competitive grants but does not include training grants

[b] NSF - data for the cellular and molecular biology biosciences divisions, directorate for biological, behavioral and social sciences

[c] NIH - data for total NIH

Source: USDA, NSF and NIH

### TABLE 2
### Funding practices in the Department of Agriculture Competitive Research Grants Program
### (FY 1978-1985)

| | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|
| Number of proposals | 1,109 | 861 | 598 | 793 | 780 | 909 | 853 | 2,592 |
| Number of grants | 197 | 193 | 206 | 207 | 212 | 219 | 219 | 504 |
| Percent (%) of proposals resulting in grants | 17% | 22% | 34% | 26% | 27% | 24% | 25.7% | 19.4% |
| Amount requested (dollars in millions) | $ 250 | $134 | $ 99.7 | $139.3 | $130.7 | $160.3 | $154 | $ 578.1 |
| Amount awarded (dollars in millions) | $ 14.4 | $ 14.55 | $ 15.04 | $ 15.5 | $ 15.83 | $ 16.46 | $ 16.4 | $ 51.7 |
| Percent of requested amount awarded | 5.7% | 10.8% | 15.1% | 11.1% | 12.1% | 10.3% | 10.6% | 8.9% |
| Average annual award per year (dollars in thousands) | - | - | - | - | - - | $ 34.3* | $35.2 | $ 51.3 |

*Grant awards averaged $74,845 but were generally for two years

Source: USDA

### TABLE 3
### Funding practices in the Physiology, Cellular and Molecular Biology Biosciences Division, Biological, Behavioral and Social Sciences Directorate of the National Science Foundation
### (FY 1980-1984)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|
| Numbers of proposals | 3,540 | 3,316 | 3,515 | 4,302 | 3,895 | 4,445 |
| Number of grants | 1,487 | 1,484 | 1,474 | 1,491 | 1,610 | 1,675 |
| Percent of proposals resulting in grants | 42% | 44.8% | 41.9% | 34.7% | 41.3% | 37.7% |
| Amount requested (dollars in millions) | - | $ 677.3 | $ 779.9 | $ 855.4 | $ 971.4 | 1,094.5 |
| Amount awarded (dollars in millions) | $ 72.1 | $ 78.2 | $ 80.1 | $ 87.3 | $ 101.4 | 113.3 |
| Percent of requested amount awarded | - | 11.5% | 10.3% | 10.2% | 10.4% | 10.4% |
| Average award per year (dollars in thousands) | $ 48.5 | $ 52.7 | $ 54.4 | $ 58.6 | $ 63.0* | $ 67.6 |

*Average size of new award is estimated at $74,000 and overhead is estimated at 30% of the award

Source: NSF

## STATEMENT OF FAITH T. CAMPBELL, NATURAL RESOURCES DEFENSE COUNCIL

The Natural Resources Defense Council (NRDC), Defenders of Wildlife (Defenders), and Center for Environmental Education (Center) appreciate this opportunity to present our views on certain appropriations for the Animal and Plant Health Inspection Service (APHIS) for Fiscal Year 1987. Additional testimony will be submitted concerning other issues under APHIS' jurisdiction. Together, these organizations represent over 100,000 people. Our members support strongly programs intended to conserve rare species of flora and fauna, including the Endangered Species Act (ESA) and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Consequently, we wish to bring to the attention of the Subcommittee on Agriculture Appropriations APHIS' continuing failure to carry out its responsibilities under these statutes.

The Endangered Species Act was enacted in 1973. It provides for the protection of listed species of animals and plants determined to be in danger of extinction. As of March 1986, 122 species of plants have been listed as endangered or threatened. These plants are protected by, *inter alia*, a requirement that any export or import be approved by a permit (issued by the U.S. Fish and Wildlife Service).

Also in 1973, the United States was host for the negotiation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. CITES, now ratified by 91 countries, requires permits for international trade in a large number of plant species threatened or potentially threatened by overexploitation. Included are all orchids, cacti, and cycads, and certain other succulents, carnivorous plants, and trees.

Under Section 3(15) of the Endangered Species Act, the Secretary of Agriculture has responsibility for enforcing controls over imports and exports of plant species listed pursuant to the Act or to CITES. This authority has been delegated to APHIS because of its long-time responsibility to inspect plant imports and exports for pests and diseases.

APHIS's Plant Protection and Quarantine (PPQ) program has an appropriation this year of $115,811,000; $1,850,000 of that is authorized under Section 15(a)(3) of the Endangered Species Act for enforcing trade controls under the ESA and CITES. In future years, this authorization is expected to increase slightly to $2,200,000.

The Administration's budget for FY 1987 requests a significant cut in PPQ funding to $83,519,000. This cut, however, is taken almost entirely from domestic pest control programs and should not affect port inspections of plant imports and exports either for pests and disease or for ensuring compliance with the Endangered Species Act or CITES.

Despite the clear legal mandate and presence of earmarked funds, APHIS has lagged in meeting its responsibilities. Since CITES came into force a decade ago, enforcement efforts by APHIS have resulted in the prosecution of only one alleged violator -- in 1978. During its consideration of the FY 1985 appropriations bill, this Subcommittee addressed several questions to APHIS. The agency's answers were vague. For example, it stated that the Department of Agriculture's Office of Investigation had investigated "several" alleged violations, but gave no information on why these cases were not prosecuted. APHIS also replied that it was considering "use of all options available" to deter violations, but committed itself to none. In its report, the full Appropriations Committee expressed concern at APHIS' delay, particularly its reluctance to impose penalties on even "known repeat offenders," and instructed APHIS to submit a report on its enforcement effort in early 1985. This "report," finally submitted in August 1985, consisted of photocopies of APHIS implementing regulation, issued in October 1984 (7 CFR Parts 355 and 356; see 49 FR 42912-42918).

In its replies to this Subcommittee's questions, APHIS had hinted that it would take certain actions in the near future to improve the enforcement effort. NRDC, Defenders, and the Center contend that APHIS has not carried out these actions and consequently that the enforcement effort remains as unsatisfactory now as it was in 1984. The only detectable progress has been by the U.S. Fish and Wildlife Service (FWS) under a contractual agreement with APHIS that is now reported to be collapsing. Thus, the only CITES cases in recent years have been brought by the U.S. Fish and Wildlife Service (FWS), not APHIS.

Although APHIS has demonstrably made little effort to enforce the ESA and CITES, there is ample evidence of numerous violation of CITES controls regarding both imports and exports. In addition to the FWS cases enumerated here, we have learned of the following examples:

- During 1978-1980, the source of information on the 1978 cycad case supplied documented tips on at least three other illegal imports; no prosecutions resulted.
- In January 1984, NRDC told FWS and APHIS that in 1983 a Texas nursery had exported hundreds of cacti, many of them belonging to highly endangered species in Appendix I of CITES, to Saudi Arabia; no prosecution has resulted.
- In December 1983-January 1984, NRDC reviewed 1982 plant export records based on APHIS pest and health inspections. This search uncovered several probable violations of CITES, including exports of over 10,000 cacti, 10,000 lady slipper orchids, and almost 3,000 pitcher plants. Other than the Anthony case mentioned above, which may have resulted from this review, no other case has been prosecuted.

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* Joseph J. Anthony of Donna, Texas, pled guilty to exporting 25 cacti of Mexican origin without the required CITES re-export permits. Anthony was fined $4,000 and placed on probation. Similarly, FWS initiated a second CITES case now pending in California against Wendell Minnich, Edward Gay, and Steven Sobel. On March 2, 1986, FWS seized 179 cacti belonging to species in Appendix I allegedly imported illegally and voluminous supporting records and photographs.

As we noted earlier, promulgation of the regulations has not resulted in an increased enforcement effort to date.

- In 1984, APHIS allowed the illegal importation of 3,900 Appendix I cacti because they were listed on the Mexican permits under 2 synonyms -- although these synonyms had been clearly mentioned on the CITES listing proposals, which were prepared by the U.S. FWS. This serious error was discovered not by APHIS or FWS, but by NRDC. The delay in correcting the error probably allowed a similar number to be imported in 1985.

- In late 1985, Arizona officials uncovered evidence of continuing illegal importations of about 300,000 cacti from Mexico. FWS is now investigating, but APHIS has denied responsibility because the initial evidence arose from interstate shipments rather than imports.

Both before and after issuance of the regulation, APHIS has refused to "look behind" CITES permits to ensure that the plants in the shipments really fit the explicit conditions on the permit.

- In March 1983, TRAFFIC (U.S.A.) informed FWS and APHIS that the 30,000+ cycads entering the country each year from the Dominican Republic were actually wild-dug, despite the use of CITES documents suitable for propagated plants. APHIS refused to prohibit imports until FWS instructed them to do so.

- In January 1986, NRDC wrote to APHIS to alert the agency to apparent illegal imports of wild-dug succulents from West Germany and Madagascar. These plants have been issued improper certificates of propagation by the exporting countries. NRDC followed up with a telephone call. The APHIS official primarily responsible for enforcing CITES has taken no action other than to forward copies of the letter to APHIS port inspectors; he has not instructed them to take any action.

APHIS continues to be handicapped in any enforcement effort by the lack of criminal investigators on its staff. For about a year, APHIS had a "contract" with FWS under which it reimbursed FWS for investigating plant cases at APHIS' request. We understand that this agreement is now on the verge of collapse due to disputes between the two agencies. Meanwhile, despite assurances given to this Subcommittee in 1984, APHIS still has made no effort to hire or train its own investigators.

APHIS' failure to develop an effective enforcement program after a decade raises serious questions about both the agency's compliance with its statutory obligations and its use of appropriated funds. NRDC, Defenders, and the Center suggest that the Subcommittee on Agriculture Appropriations ask APHIS the following questions:

- Exactly how many allegations of violations of CITES has APHIS received since CITES came into effect in 1975? Exactly how many of these allegations has APHIS or the USDA Office of

Investigation investigated? Exactly how many has APHIS asked the U.S. Fish and Wildlife Service to investigate on its behalf?

- Exactly how many civil penalties, other than forfeiture of the plants themselves, has APHIS imposed on plant importers or exporters who have not complied with CITES?

- What is the current status of the APHIS-FWS agreement governing investigations of alleged violations? How many APHIS staff are trained in investigating alleged violations and preparing criminal cases? If none, how does APHIS plant to carry out its legal obligations to enforce CITES? When does it propose to hire or train investigations?

We urge, further, that the Subcommittee earmark $500,000 of the funds authorized to enforce CITES (for FY 1987, $2 million is contained in both the House and Senate bills reauthorizing the Endangered Species Act) for the hiring and training of criminal investigators. Funding at this level would enable placement of such investigators in the centers of the U.S. international plant trade: southern Texas, southern California, San Francisco, southern Florida, New York, and Baltimore and St. Louis (export centers for ginseng).

In its reply to this Subcommittee, APHIS stated that its new regulations would enhance control over exports by requiring that they exit through designated ports. Unfortunately, NRDC, Defenders, and the Center must question whether even this assertion has been fulfilled. APHIS now relies on two state agencies, those of California and Florida, to inspect and approve exports of allegedly propagated CITES protected plants from nurseries in those states. This practice appears to be in conflict with APHIS' regulations, specifically the footnote to 7 CFR Part §355.22(b). NRDC, Defenders, and the Center are concerned that this practice will allow continued export of wild-dug plants incorrectly described as propagated. At least one nursery now being inspected by Florida phytosanitary agents, Costa Nursery Farms, is a major trader in wild-collected cycads. To clarify this situation, NRDC, Defenders and the Center request that the Subcommittee ask APHIS the following questions:

- APHIS' regulations, specifically the footnote to § 355.22(b), explicitly require that plants protected by CITES or the Endangered Species Act and intended for export "be presented at the port for export together with the documents" at the time of validation of CITES or Act export documents. Are plants which are claimed to be artifically propagated, and which are inspected by cooperating state phytosanitary officials in Florida or California, now presented to APHIS personnel at a designated port at the time of validation of the export documents? If not, how does APHIS explain this variance from its own regulations?

- How does APHIS supervise the activities of the state cooperating agencies to ensure that their personnel understand and carry out their responsibilities and that violators are apprehended?

- Does the application for APHIS' "General Permit" require information as to the source of the applicants' plants, specifically whether they are propagated in accordance with CITES definitions? The regulations (§355.11, at 49 FR 42913) do not appear to request such information. If not, on what basis does APHIS assert that these General Permits conform to the resolution, Conf. 5.26, adopted by the Parties at the Fifth Meeting of the Conference of the Parties to CITES?

The Subcommittee should require answers to these questions by the middle of May, so that they may be considered in its appropriations mark-up. Furthermore, the United States and other CITES parties will gather for an important committee meeting in June; U.S. officials should be able to answer criticisms of the U.S. enforcement effort at this meeting.

NRDC, Defenders, and the Center believe that APHIS can become effective in enforcing statutes intended to protect endangered plant species, but only if certain changes made in current practice. We look to the Subcommittee on Agriculture Appropriations to ensure that the minimal step of hiring criminal investigators is taken early in FY 1987. We further hope that the Subcommittee will help to overcome other deficiencies in the program.

## STATEMENT OF JACK A. BARNETT, EXECUTIVE DIRECTOR, COLORADO RIVER BASIN SALINITY CONTROL FORUM

Requesting additional funds over and above the 1987 budget request by the President for the Colorado River Basin Salinity Control Program.

Including:

1) $4,000,000 for on farm salinity control
2) $2,000,000 for SCS and other technical assistance.

Congress passed significant salinity control legislation for the Colorado River Basin two years ago. The legislation authorized a new Department of Agriculture program and requires the state and local entities to cost share in amounts at least equal to the federal contribution. This newly authorized program will facilitate the salinity control efforts by the Department of Agriculture in the Colorado River Basin and will replace efforts that were started under general authorities already vested in the Department of Agriculture where approximately $6 million a year has been designated by the Congress over the last few years to be spent for salinity control.

The water of the Colorado River system serve some 17 million people and irrigates about 1.6 million acres in parts of the seven Colorado River basin states. Salinity has long been recognized as one of the major problems in the river. Water users situated lower in the river system have suffered significant adverse impacts due to the river's salinity. It has been estimated that salinity damages amounted to more than $100 million a year. Without salinity control measures, and with increased demands for Colorado River water in the basin, the river's salinity is projected to increase, further impairing the usefulness of this water supply. It is projected that without salinity control the economic damages suffered by water users will double by the turn of the century.

Concerns about the increasing salinity of the river led to creation of the Colorado River Basin Salinity Control Forum in 1973. The Forum, whose members are appointed by the governors of the respective states, developed a salinity control policy that calls for maintaining salinity concentrations at or below those levels found in the lower river in 1972 while the basin states continue to develop their compact apportioned waters. This salinity control objective is the Basin states adopted, EPA approved, water quality standard for the Colorado River Salinity problem which was adopted persuent to the Clean Water Act. The policy forms the basis for the cooperative federal-state basin wide salinity control plan. The Forum has a continuing responsibility to see that a salinity control plan is implemented to meet the policy objectives.

In 1974, after discussions between the federal government, the Republic of Mexico, and the seven Colorado River Basin states, Congress enacted the Forum sponsored Colorado River Basin Salinity Control Act (P.L. 93-320). Title I of the Act established a program to reduce the concentration of salts in the Colorado river below Imperial Dam, the last diversion point in the United States, so that the United States could honor it's 1973 agreement on Colorado River Salinity with Mexico. In Title II, the Act established a program which allowed the states and the federal government to work together to prevent salinity increases in the Colorado River above Imperial Dam, benefiting users in the United States as well as Mexico. The 1974 Act also created a Colorado River Basin Salinity Control Advisory Council, composed of governor appointed representatives of the Basin states, to advise the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency as to needed annual adjustments to the salinity control effort.

In 1984, Congress enacted much needed amendments to the 1974 Act that were advanced by the Forum. The amendments, Public Law 98-569, authorized additional activities for the Departments of the Interior and Agriculture that are needed in order to meet the objectives of the Act. In recognition of the proven cost effectiveness of Agriculture's on farm management activities in controlling river salinity in the Basin, a separate Colorado River Basin on farm management salinity control program was authorized for the Department of Agriculture.

The Advisory Council, in working with Agriculture, made specific recommendations in its 1985 Annual Report relative to Fiscal Year 1987 funding of the salinity control efforts consistent with the newly enacted amendments. The recommended funding level is that required to maintain the adopted salinity standard. The President's proposed Fiscal year 1987 budget activities calls for no funding for Agriculture's on farm program. This is despite the fact that the program has been funded in the past by congressionaly designated ACP funds and the President had requested in two past fiscal years more than $12,000.000 per year in anticipation of the new congressional authorization.

The proposed level of funding in the President's budget seriously jeopardizes the continued progress and effectiveness of the Colorado River salinity control efforts. It seriously restricts the implementation of the cost effective on farm salinity control measures of the Department of Agriculture that were initiated in 1979.

At a time when the nation faces significant financial difficulties, it is recognized that funds for every federal program must be reviewed. However, the Advisory council's funding recommendations are considered to be the minimum level of funding necessary to assure that salinity control efforts move forward in a timely manner. Work must continue on the Department of Agriculture's on farm program. Delays will not only result in greater salinity pollution of the Colorado River but ultimately will require that a greater amount of funds be spent on this effort.

To maintain a realistic efficient schedule the President's budget needs to be increased by $6.0 million for Agriculture's on farm program and associated technical assistance. The federal government need not pay the entire cost of these salinity control activities. The requested federal cost sharing money represents less than half of the total on farm program cost.

Under the newly authorized, cooperative on farm salinity control program, a combined state and local contribution of 51 percent will be provided, as a minimum, non federal sharing of costs. This is a significant increase in the non federal contribution as compared to the continued Congressional designation of the use of ACP funds as has been the case in every year since 1979.

In behalf of the Forum let me express our appreciation for the opportunity to convey to Congress our thoughts and state that we strongly urge the establishing an agricultural line item for Colorado River Basin salinity control as action now with respect to this appropriation will result in the most cost effective program both in the short and long term.

## STATEMENT OF BERNARD MEGARD, PRESIDENT, CONTACT LENS MANUFACTURERS ASSOCIATION

The Contact Lens Manufacturers Association (CLMA) appreciates the opportunity to present these views to the Subcommittee. CLMA is a trade association representing approximately 170 manufacturers. The active members of the association are engaged in the manufacture of contact lenses. Associate members are manufacturers of related products, such as lens blanks and optical lathes. Our membership is principally composed of small to medium-size manufacturers, although large corporations are also represented.

Our association is dedicated to maintaining the highest professional standards for our industry. Our members' products are made to the prescription of a licensed eye care practitioner; they are not supplied directly to the public. The lenses we manufacture are subjected to careful inspection by us and by the practitioner before they are fitted to the patient. A manufacturer who is unable or unwilling to enforce painstaking production and quality control measures does not belong -- and will not survive -- in this market.

Contact lenses are regulated as medical devices under the Federal Food, Drug, and Cosmetic Act (21 USC 321, et seq.; hereinafter "Act"). Accordingly, our Association is vitally concerned with the implementation of the Act by the Food and Drug Administration (FDA) -- particularly the Medical Device Amendments of 1976 (Amendments).

We are aware that the FDA has presented a budget request to this Subcommittee which would maintain the pre-Gramm-Rudman-Hollings level of program operations. The projected program increases, which this funding would support, would be entirely in the area of new drug review.

The CLMA is concerned that such emphasis fails to reflect the present serious backlog in the FDA's approval of medical device premarket approval applications (PMA's). While the Act provides that these PMA's are to be processed by FDA within 180 days, only an estimated nine percent of such submissions are in fact being processed within this time frame. The result has been to threaten the continued viability of the small and medium contact lens manufacturers. If this situation is not remedied soon, the contact lens marketplace may become the sole domain of those few large corporations having the resources to wait out the FDA review process and meet the other inappropriately high regulatory costs imposed by present FDA regulations and policies.

The answer, however, is not simply to compound the present budgetary crisis by increasing the FDA's appropriation. More immediate and less costly improvement could be readily obtained by a revision in FDA policies. The agency's regulation of contact lenses and related products is anticompetitive and constitutes an unjustified drain on FDA's resources with no offsetting benefit to the public. The CLMA believes that this Subcommittee will wish to weigh requests for the commitment of additional funds against FDA's regulatory policies with respect to the regulation of contact lenses and related products -- such as lens cases and solutions. The continuation of such policies is especially unjustified in view of the economic realities which led to the Gramm-Rudman-Hollings deficit reduction legislation. FDA's anticompetitive regulation of contact lenses is expensive and diverts agency resources that are needed elsewhere.

Specifically, FDA's determination to keep daily wear contact lenses and products in class III -- the highest, and most expensive level of regulation -- has deluged the agency with needless PMA's for what are essentially innocuous products which clearly do not meet the statutory definition of class III medical devices (21 USC 360c(a)(1)(C)).

These contact lens-related PMA's constitute almost half of such submissions received by the agency. A long overdue agency reclassification of daily wear contact lenses out of class III would, accordingly, result in substantial FDA resources becoming available for other more pressing activities.

Daily wear contact lenses have been on the market in various forms since shortly after the close of World War II. The old fashioned "hard" (PMMA) contact lens has, in fact, been successfully regulated for years as a class I device.[1] Even the more recent hard lenses (termed "rigid gas permeable," or RGP) have now been in the market for almost ten years. Like the original PMMA Lens, the RGP lens is essentially an inert hemispheric shell. It does not belong in class III. As noted, the agency should reclassify it to a more appropriate level of regulation.

As non-class III devices, such lenses would not have to go through the expensive and time-consuming PMA procedures. Freed of the unproductive task of processing scores of PMA's for innocuous contact lens products, the agency's valuable scientific staff could be redirected to addressing the many pressing tasks which have been pointed out to it by various critics -- both Congressional and private.

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[1] In January of 1982, FDA proposed to place PMMA contact lenses in class II (47 Fed. Reg. 3694). The proposal is still pending. Since there is no performance standard for such lenses, their de facto level of regulation is class I (general controls). Further indication of the disproportionate regulatory treatment of RGP lenses is found in a review of the ophthalmic devices which FDA, following the advice of its expert panel, has proposed for class II, e.g. extracular orbital implant ("a device used in scleral surgery for buckling or building up the floor of the eye"), artificial eye ("a removable prosthetic device resembling the eyeball, usually made of glass or plastic"), and eye sphere implant ("an implanted device used to occupy the space in the eyeball following the removal of the contents of the eyeball").

Thus, the agency has regulatory means to substantialy alleviate the shortages in funding to which it has directed the Subcommittee's attention.

## STATEMENT OF SUSAN HAGOOD, WILDLIFE MANAGEMENT SPECIALIST, DEFENDERS OF WILDLIFE

Thank you very much, Mr. Chairman, for the opportunity to express the views of Defenders of Wildlife with respect to the FY87 U. S. Department of Agriculture budget for the Animal and Plant Health Inspection Service (APHIS), the Extension Service (ES), the Agricultural Stabilization and Conservation Service (ASCS) and the Cooperative State Research Service (CSRS). I am Susan Hagood, Wildlife Management Specialist for Defenders of Wildlife. I would like to request that my entire statement be incorporated in the Record.

Defenders of Wildlife is a "new face" before the Subcommittee. Our interest in the budget of these USDA agencies stems primarily from the December, 1985 transfer of the Animal Damage Control (ADC) Program from the Department of the Interior's Fish and Wildlife Service to USDA's APHIS.

Defenders is a national, non-profit conservation organization with more than 79,000 members. Our goal is to preserve, enhance and protect the natural abundance and diversity of wildlife and the integrity of wildlife ecosystems. We support the protection and recovery of threatened and endangered species, the preservation and enhancement of our national wildlife refuge system and the promotion of wildlife management philosophies that benefit all wildlife.

Defenders of Wildlife is well known for its active role in predator management. Our concern for the protection of indigenous predators as indispensable components of wildlife communities is evidenced in part by decades of involvement with the federal Animal Damage Control Program. This program has primary responsibility for the reduction of predator damage to domestic livestock. While we recognize that predation, caused primarily by coyotes, is a genuine and very serious problem for some livestock producers, Defenders believes that the answer to the problem of livestock predation does not lie in the simple reduction of coyote populations. Yet such an approach has characterized the Animal Damage Control Program throughout its history and has generated the long and continuing controversy which surrounds it.

Defenders recognizes that for the approach to livestock protection to change, safe and effective alternatives to lethal predator control must be available. We have therefore actively supported research on promising alternatives to lethal predator control. We urge that such research continue within the budget of the ADC Program.

### ANIMAL DAMAGE CONTROL PROGRAM RESEARCH RECOMMENDATIONS

### TOTAL — $345,000

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|---|---|
| Minnesota Livestock Guarding Dog Research | $45,000 |

Defenders strongly recommends that $45,000 for the continuation of Minnesota livestock guarding dog research be earmarked within the FY87 ADC research budget.

In 1985, $45,000 was added to the FY86 ADC budget to initiate a proposed two-year research program to determine whether livestock guarding dogs can protect Minnesota livestock, primarily cattle, from predation by the threatened eastern timber wolf. The use of livestock guarding dogs offers one solution to wolf predation on domestic livestock which is acceptable both to the Minnesota livestock industry and to those concerned with wolf recovery.

Dr. Ray Coppinger of the New England Farm Center of Hampshire College in Amherst, Massachusetts, is the foremost livestock guarding dog researcher in the country today. Dr. Coppinger and his wife, Lorna, also a livestock guarding dog researcher, continually monitor the success of the 770 dogs that have been produced in the Farm Center's Livestock Guarding Dog Project since its inception in 1978. The data they are accumulating from these programs is forming the foundation of a nationwide livestock guarding dog network which seeks to ensure that the breeds best suited for guarding U.S. livestock are used and that only the best individuals are bred. Their work is also refining training techniques and contributing toward the current 80-90% success rate of many dogs in the program.

Funds for the FY87 Minnesota livestock guarding dog program should pass through the New England Farm Center, as has funding for the FY86 Minnesota research. Pups have been placed with calves at the Farm Center to begin the bonding process, a critical stage in the training of a successful guarding dog. These pups will shortly be moved to Minnesota and placed with cooperating farmers to begin their work as livestock guardians. Their numbers will be augmented by additional dogs bred at the Center and in the state. The success of each dog will be closely monitored by livestock producers, Minnesota researchers and the Coppingers.

## Conditioned Taste Aversion $300,000

Defenders recommends that $300,000 in the FY87 ADC research budget be earmarked to support the third year of conditioned taste aversion research.

Taste aversion is a method of predator deterrence in which mutton baits are laced with an emetic, lithium chloride. Coyotes consuming the bait become ill for several hours. After recovery, the coyote may immediately cease to kill sheep, or, depending on the extent of its prior experience with sheep, may try to kill once or twice before a strong mutton aversion is established and it switches to other prey.

Taste aversion is used with great success in parts of Canada. The method is extremely inexpensive and easy to use. But research conducted on the technique in this country has thus far raised nearly as many questions as it has answered. Defenders is supporting a five-year study to answer these questions and determine if this is indeed a viable predator control technique. Dr. Carl Gustavson, the foremost expert on conditioned taste aversion in this country, is the principal investigator. Dr. Debra Forthman Quick is co-principal investigator. The project is administered by the Center for Environmental Studies at Arizona State University, and is underway in Arizona, California and Nevada.

This research was Congressionally funded at $100,000 in FY85 and FY86, although the budget request for FY86 work was $200,000. The 50% reduction in needed funding for the second year significantly slowed the progress of the study. It is thus extremely important that this project is funded for FY87 at the $300,000 level. This level of funding will enable researchers to proceed with the most costly portion of the study -- hiring workers to make and distribute thousands of baits in the three states and monitor the results of bait distribution.

## FY87 EXTENSION SERVICE BUDGET

## VERTEBRATE INTEGRATED PEST MANAGEMENT SPECIALISTS

## TOTAL -- $247,000

### Northwest Region (OR, WA, ID) $88,000

Defenders recommends that $88,000 be added to the FY87 Extension Service budget for the support of a Northwest Extension IPM Specialist to continue and expand the successful Oregon livestock guarding dog project to Washington and Idaho, and to undertake assistance to agricultural producers with other losses to wildlife.

From FY84-86 Congress and the State of Oregon appropriated non-recurring funds for a pilot project designed to provide livestock guarding dogs to Oregon sheep producers suffering losses to coyotes, and to monitor closely the success of each dog. This project is demonstrating that the use of these dogs can reduce predation. In 1983, five Oregon sheep producers added guarding dogs to their operations. In 1984 and 1985, 40 more producers began using the dogs. By December of 1985 there were nearly 100 guarding dogs on 60 Oregon ranches. Data collected in 1984 indicate that 88% of adult livestock guarding dogs helped to reduce losses; 58% achieved a perfect (zero losses) or near perfect (less than two losses) record. It is estimated that guarding dogs saved Oregon livestock producers $50,000 in 1984.

The Oregon livestock guarding dog program is administered by the Extension Service at Oregon State University with a combination of state and federal funds. Jay Lorenz, formerly of the New England Farm Center's Livestock Guarding Dog Program, is the Extension Specialist in charge of the program. This program is enjoying widespread support throughout the state from the Extension Service, the livestock industry and enviromentalists.

As a result of the success of the Oregon program, producers in neighboring states are expressing a desire for a similar program. Recent meetings with Extension officials have resulted in a proposal to expand the responsibilities of the Oregon Extension Specialist to include Washington and Idaho. While the emphasis of the Extension Specialist will initially be on implementing a livestock guarding dog program in the three states, other information on reducing damage caused by vertebrate wildlife will be collected and distributed in keeping with the proposal to ultimately provide agricultural producers a comprehensive program of vertebrate damage control.

The Oregon Livestock Guarding Dog Advisory Committee, made up of representatives of the Extension Service, livestock industry, environmentalists and the public will be reconstituted to ensure Washington and Idaho representation.

### Wyoming $82,000

Wyoming Extension officials, livestock producers and environmentalists have also expressed interest in the placement of an Extension Service Specialist to provide assistance in the reduction of agricultural losses to wildlife. Wyoming is one of the nation's largest producers of sheep, and has a long history of conflict between livestock producers and wildlife.

Funding needs for a Wyoming Program would be similar to those for the Northwest regional program. Travel and phone budgets would be somewhat reduced, however, due to the smaller area involved. An Advisory Committee should be established to ensure widespread representation and support.

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|---|---|
| New England (ME, MA, NH, VT) | $77,000 |

In recent decades, coyotes have expanded their range into most eastern states; their presence has sparked discussion and controversy. New England livestock producers will increasingly need information about techniques to deter predation by coyotes and domestic dogs. In addition, farmers in this region need assistance in reducing other types of agricultural losses common to the East, such as deer damage to orchards and haystacks and bird depredation.

Extension officials in New England have expressed a desire for an Extension Specialist to coordinate control of vertebrate wildlife damage. Due to the small size of several of the states and existing budgetary constraints, one specialist could assume responsibility for Maine, Massachusetts, New Hampshire and Vermont. The advisory committee would include representatives from all states and major agricultural interests.

## FY87 AGRICULTURE STABILIZATION AND CONSERVATION SERVICE BUDGET

### INCENTIVE PROGRAM -- $150,000

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|---|---|
| Northwest Region and Wyoming | $50,000 |
| Wyoming | 50,000 |
| New England | 50,000 |

Defenders recommends that $150,000 ($50,000 each for the Northwest Region, Wyoming and New England) be added to the FY87 budget of the Agriculture Stabilization and Conservation Service.

An important component of the proposed program for controlling damage by vertebrate wildlife is economic incentive. The Oregon project has demonstrated that producers are sometimes reluctant to try new techniques if they fear financial losses in case the alternatives do not produce the expected results. Further, some of the alternatives require initial investments which discourage adoption.

Defenders recommends that an incentive program be established to assist producers. Payments should be awarded to qualifying individuals through ASCS. Recommendation for approval should be made by the Advisory Committee.

## FY87 COOPERATIVE STATE RESEARCH SERVICE BUDGET

### RESEARCH -- $150,000

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|---|---|
| Northwest | $50,000 |
| Wyoming | 50,000 |
| New England | 50,000 |

Defenders recommends that a total of $150,000 ($50,000 each for the Northwest, Wyoming and New England) be added to the FY87 CSRS budget for research on new alternative vertebrate damage control techniques. Funds for research projects should be appropriated under the "Special Research Grants" category of CSRS for distribution to the states by competitive bid or to specific states. Such funding would encourage the development of new alternatives which can be introduced to producers and county agents by the Extension Vertebrate IPM Specialists.

Thank you very much, Mr. Chairman, for the opportunity to present the views of Defenders of Wildlife to the Subcommittee. I would be happy to provide Members of the Subcommittee with additional information on any of these issues.

## DEFENDERS OF WILDLIFE

## FY87 USDA BUDGET RECOMMENDATIONS

## SUMMARY SHEET

| | |
|---|---|
| Animal Damage Control Research | |
| Minnesota Livestock Guarding Dog | $ 45,000 |
| Conditioned Taste Aversion | 300,000 |
| Extension Service Vertebrate IPM Programs | |
| Pacific Northwest | 188,000 |
| Extension Specialist -- $88,000<br>Incentive Program -- 50,000<br>Research -- 50,000 | |
| Wyoming | 182,000 |
| Extension Specialist -- $82,000<br>Incentive Program -- 50,000<br>Research -- 50,000 | |
| New England | 177,000 |
| Extension Specialist -- $77,000<br>Incentive Program -- 50,000<br>Research -- 50,000 | |
| **TOTAL** | **$892,000** |

## PROPOSAL

## INTEGRATED PEST MANAGEMENT SPECIALISTS

## PREVENTING WILDLIFE DAMAGE TO LIVESTOCK AND OTHER AGRICULTURAL CROPS

### Objective

**The purpose of the proposed program is to encourage Extension Service leadership in expediting the implementation of alternative techniques for reducing vertebrate pest damage to livestock, forestry and agricultural crops. The long-term goal is to prevent such damage without adversely affecting wildlife.**

### Background on the Oregon Pilot Program

From FY 1984-1986 Congress and the State of Oregon appropriated non-recurring funds for a pilot project designed to make livestock guarding dogs available to sheep producers suffering losses to coyotes. This applied research project offers the producers immediate benefits resulting from a reduction in predation while the technique is evaluated and modified under actual field conditions to improve the overall effectiveness of the dogs.

Federal funds were initially administered through the U.S. Fish and Wildlife Service since that agency had jurisdiction over animal damage control research. However, the Animal Damage Control Program recently has been transferred to the U.S. Department of Agriculture. Oregon's share of the program is funded by the State Department of Agriculture, and the program is administered by the Extension Service at Oregon State University. An Extension Specialist, Jay Lorenz, was hired from the New England Farm Center at Hampshire College in Amherst, Massachusetts, where extensive research on guarding dogs is underway.

The Oregon pilot project is demonstrating that the successful use of livestock guarding dogs in protecting sheep from predators requires an educational and research support system. With such an infrastructure, the results have been impressive. In 1983, five sheep producers added guarding dogs to their operations. In 1984 and 1985, 40 more producers began using guarding dogs. By December 1985 there were nearly 100 guarding dogs on 60 Oregon ranches. In 1984, 88% of the adult dogs were recorded as helping to reduce losses and 58% achieved a perfect (0 losses) or near perfect (less than 2 losses) record.

The Oregon Extension Specialist, in cooperation with county agents:

1) Provides educational programs and material on the behavior and management of guarding dogs;
2) Assists sheep producers in obtaining and training a dog;
3) Consults with producers when problems arise, and
4) Develops strategies for using dogs in management conditions where they are not currently used.

On occasion, the specialist transfers dogs from one ranch to another, matching the talents of the dog to ranch management. Matching dog to ranch further serves to maximize the potential of this system of predator control. Without an individual assuming a leadership role, some producers in other areas have had poor success with the dogs because they lacked basic information or assistance in obtaining and training a good livestock guarding dog.

A significant benefit of the Oregon program is the fact that sheep producers, environmentalists, animal protection groups, legislators and agency personnel are supportive of guarding dogs. This project has made allies of traditional adversaries.

The Oregon program serves as a model for other states. However, the services offered by the specialist need not be limited exclusively to the placement of guarding dogs with sheep producers. For instance, there may be a need for information on other nonlethal predator control techniques or techniques aimed at reducing losses of other agricultural products to wildlife. The program should be limited in scope to an integrated pest management (IPM) approach. Initially used to combat insect pests, the IPM system now suggests a similar approach to deal with vertebrate damage control.

**Proposed Structure**

Personnel. Each state or region with wildlife damage problems should have at least one FTE whose responsibility is to assist producers in the implementation of alternative, nonlethal forms of controlling damage caused by vertebrate wildlife. Minimum support includes a travel budget, part-time clerical assistance, and office space and supplies. A sample job description is attached (page 8).

A recommended funding mechanism is to establish a 3-d (Smith-

Lever), line item to be distributed to the states at the discretion of ES-USDA. The states could then bid competitively for the project funds. The appropriations committees could provide funding without new authorizing language.

Advisory Committee. An informal committee should be appointed with representatives of the livestock industry, other agricultural commodity producers with vertebrate wildlife problems, agriculture researchers, wildlife biologists, the environmental community, and the public at large. The purpose of this committee is to formalize the relationship between the Extension Service and its new, broader constituency, thereby ensuring public participation and support for the program. The Advisory Committee can suggest new techniques for the Vertebrate IPM Specialist to investigate, and where appropriate introduce such techniques to producers.

**Priorities**

Initially, emphasis should be on placing livestock guarding dogs with cooperating ranchers to protect livestock from coyotes in states where predation is a problem. This project meets the essential criteria suggested for an IPM project:

1) Traditional means of control are controversial and objectionable to the public;
2) There are significant commercial losses to vertebrate wildlife, and
3) A viable alternative exists, but is not widely accepted due to lack of information.

**Incentives**

An important component of the proposed program for controlling wildlife damage by nonlethal means is economic incentive. The Oregon project has demonstrated that producers are sometimes reluctant to try new techniques if they fear financial losses in case the alternatives do not produce the expected results. Also, some of the alternatives require initial investments which discourage adoption.

An incentive program should be established to assist producers. A revolving fund should contain a minimum of $50,000 annually for each state or region. Requests for grants or loans should be approved by the specialist and submitted to the Advisory Committee for evaluation based on the following criteria or standards:

1) Commercial operators only;
2) Substantial crop losses occurring;
3) Proposed alternative is environmentally safe, and
4) Incentive payment will be used for the purchase of equipment or supplies which are likely to be effective in preventing wildlife damage.

Listed below are some of the projects which might be candidates for funding in the incentive payment program:

1) Assistance to producers with purchasing guarding dog breeding stock and raising replacement dogs. Producers should have vested interest by paying a major portion of obtaining and maintaining the dogs;
2) Low or no-interest loans or grants for the construction of coyote-proof fences, lambing sheds, and other predator-deterrent structures;
3) Purchase of repellents or aversive agents to control wildlife damage to a variety of crops, and
4) Assistance to producers with purchasing materials for structural prevention of damage (e.g., netting to protect

fruit crops from bird damage or screens to keep beavers and muskrats away from dikes or banks).

Incentive payments should be awarded to qualifying individuals through USDA Agriculture Stabilization and Conservation Service (ASCS) or through state agriculture agencies. If states provide money for the incentives, the state agencies should disperse the funds. If Congress appropriates funding, or if states contribute to regional incentive funds, the moneys could be dispersed by USDA or by a multistate council. In any case, recommendation for approval should be made by the Advisory Committee or an appropriate subcommittee familiar with the purposes of the program.

**Research**

The vertebrate IPM project also needs earmarked funding for applied research on new alternative techniques. Research proposals should meet the following guidelines:

- Projects should be coordinated with other federal or state facilities working on alternative methods of vertebrate wildlife damage control.
- Researchers must be qualified in the appropriate field.
- Methods to be researched need further testing and improvement before full implementation.
- Techniques should offer potential alternatives, or nonlethal solutions to problems traditionally solved by killing wildlife nonselectively.
- Damage to commodities in question should be substantial in a particular area to warrant priority status.
- Projects should be supported in concept by industry, academic, environmental and public members on Advisory Panel.
- Research should be endorsed by the Extension Wildlife Specialists in the appropriate geographic area.
- Results should be written in clear, nontechnical language, useful to producers and demonstrated by appropriate Extension procedures.

Funds for research projects should be appropriated under the "Special Research Grants" category to CSRS-USDA for distribution to the states by competitive bid or to specific states (OR, WA, ID, WY, others).

According to this arrangement, researchers could compete for funds appropriated annually to the wildlife damage prevention project. This would encourage the development of new alternatives which can be introduced to producers and county agents by the Extension Vertebrate IPM Specialists.

## INTEGRATED PEST MANAGEMENT PROGRAM TO PREVENT WILDLIFE DAMAGE TO LIVESTOCK AND OTHER CROPS

### PACIFIC NORTHWEST -- Oregon, Washington, Idaho

Due to the success of the Oregon Guarding Dog Pilot Project, there is substantial interest among livestock producers, extension agents, and the environmental community in expanding the program to other states. Recognizing the budgetary constraints imposed on all government-funded programs, and the fact that coyote predation on sheep is only one of many wildlife damage problems needing attention, the expansion of the existing specialist's territory to Washington and Idaho in FY 1987 is proposed. This plan would require only a modest increase in funding to cover additional travel and telephone costs, and shift the emphasis of the specialist from working directly with individual producers. Although the specialist could still hold workshops for producers and respond to direct inquiries from them, the goal of the program would be to provide sufficient information to county agents so that they can assist producers.

There have been a number of Extension Specialists in the northwest serving the three states, which have similar agricultural practices. The specialist could remain in Corvallis where a support system is already established.

The Oregon Guarding Dog Advisory Committee should be reconstituted to include members from Washington and Idaho.

A proposed budget appears on page nine.

## WYOMING

Wyoming Extension officials, livestock producers and environmentalists have also expressed interest in the placement of an Extension Service Specialist to provide assistance in the reduction of agricultural losses to wildlife. Wyoming is one of the nation's largest producers of sheep, and has a long history of conflict between livestock producers and wildlife.

Funding needs for a Wyoming Integrated Pest Management Program would be similar to those for the Northwest Regional Program. Travel and phone budgets would be somewhat reduced, however, due to the reduced area involved.

A proposed budget appears on page ten.

## NEW ENGLAND -- Maine, Massachusetts, New Hampshire, Vermont

In recent decades, coyotes have expanded their range into most eastern states. Their presence has sparked discussion and controversy. New England livestock producers will increasingly need information about techniques to deter predation by coyotes and domestic dogs. In addition, farmers in this region need assistance in reducing other types of agricultural losses common to the East, such as deer damage to orchards and haystacks and bird depredation.

Extension officials in New England have expressed a desire for an IPM Extension Specialist. Due to the small size of several of the states and existing budgetary constraints, one specialist could cover Maine, Massachusetts, New Hampshire and Vermont.

A proposed budget appears on page eleven.

## INTEGRATED PEST MANAGEMENT SPECIALIST
## WILDLIFE DAMAGE CONTROL

### JOB DESCRIPTION

1. Develop and present educational programs on behavior and management of livestock guarding dogs, coyote-proof fencing, and other alternative techniques to county agents and producers.

2. Assist agents and producers in obtaining livestock guarding dogs from reputable genetic stock and in setting up breeding programs for replacement stock.

3. Advise county agents and clients on management of guarding dogs, construction of predator fences, and other nonlethal methods of preventing losses to wild animals.

4. Evaluate effectiveness of management and recommend modifications to increase effectiveness.

5. Inform county agents and researchers as to availability of research funds and incentive payments.

6. Organize advisory committee to ensure representation of interested parties and support for the project.

7. Review grant proposals to conduct applied research on wildlife damage problems and recommend funding for projects meeting established criteria and offering the greatest potential benefits for the lowest cost.

8. Collect published information on nonlethal methods of controlling wildlife damage and disseminate to producers and the public as appropriate.

9. Develop informational pamphlets on alternative techniques and distribute through the Extension Service.

10. Evaluate data on wildlife damage complaints on statewide basis and identify the most serious problems to producers.

11. Evaluate the relative hazards associated with chemicals and other lethal means of reducing vertebrate pest damage to determine the most environmentally hazardous techniques. For example, chemicals used in some bird control efforts have secondary poisoning effects on raptors; certain rodenticides cause widespread nontarget wildilfe mortality.

12. Evaluate alternatives to the most toxic chemicals which are available for reducing damage and recommend one or more for priority implementation and evaluation.

## FY 1987 ~~PACIFIC~~ ~~NORTHWEST~~ REGIONAL BUDGET
## EXTENSION INTEGRATED PEST MANAGEMENT PROGRAM
## PREVENTING WILDLIFE DAMAGE TO LIVESTOCK

Personnel

| | |
|---|---|
| Salary of Extension Specialist + OPE | $38,000 |
| Classified Support - 1/2 time + OPE | 10,000 |
| Travel | 8,000 |
| Materials and Supplies | 6,000 |
| Phone | 4,000 |
| Dog Supplies | 2,000 |
| New England Farm Center Support - dogs, transportation, computer | 20,000 |
| Total | $88,000 |
| Incentives | $50,000 |

Examples:

. Direct purchase of dogs

- Cost of breeding replacement dogs
- Assistance with feeding, etc.
- Low interest, or no interest loans for special fencing
- Grants for fence construction
- Purchase repellents, aversive agents

| | |
|---|---|
| Research | $50,000 |

New techniques should:

- Have widespread applicability to wildlife damage problems
- Replace environmentally hazardous techniques
- Be nonlethal to wildlife

| | |
|---|---|
| TOTAL | $188,000 |

## FY 1987 WYOMING BUDGET
## EXTENSION INTEGRATED PEST MANAGEMENT PROGRAM
## PREVENTING WILDLIFE DAMAGE TO LIVESTOCK

Personnel

| | |
|---|---|
| Salary of Extension Specialist + OPE | $38,000 |
| Classified Support - 1/2 time + OPE | 10,000 |
| Travel | 4,000 |
| Materials and Supplies | 5,000 |
| Phone | 3,000 |
| Dog Supplies | 2,000 |
| New England Farm Center Support - dogs, transportation, computer | 20,000 |
| Total | $82,000 |

| | |
|---|---|
| Incentives | $50,000 |

Examples:

- Direct purchase of dogs
- Cost of breeding replacement dogs
- Assistance with feeding, etc.
- Low interest, or no interest loans for special fencing
- Grants for fence construction
- Purchase repellents, aversive agents

| | |
|---|---|
| Research | $50,000 |

New techniques should:

- Have widespread applicability to wildlife damage problems
- Replace environmentally hazardous techniques
- Be nonlethal to wildlife

| | |
|---|---|
| TOTAL | $182,000 |

## FY 1987 NEW ENGLAND REGIONAL BUDGET EXTENSION INTEGRATED PEST MANAGEMENT PROGRAM PREVENTING WILDLIFE DAMAGE TO LIVESTOCK

Personnel

| | |
|---|---|
| Salary of Extension Specialist + OPE | $38,000 |
| Classified Support - 1/2 time + OPE | 10,000 |
| Travel | 4,000 |
| Materials and Supplies | 5,000 |
| Phone | 3,000 |
| Dog Supplies | 2,000 |
| New England Farm Center Support - dogs, transportation, computer | 15,000 |
| Total | $77,000 |

| | |
|---|---|
| Incentives | $50,000 |

Examples:

- Direct purchase of dogs
- Cost of breeding replacement dogs
- Assistance with feeding, etc.
- Low interest, or no interest loans for special fencing
- Grants for fence construction
- Purchase repellents, aversive agents

| | |
|---|---|
| Research | $50,000 |

New techniques should:

- Have widespread applicability to wildlife damage problems
- Replace environmentally hazardous techniques
- Be nonlethal to wildlife

| | |
|---|---|
| TOTAL | $177,000 |

## STATEMENT OF JAMES A. GRAHAM, NORTH CAROLINA COMMISSIONER OF AGRICULTURE

Senator Cochran and members of the committee: Thank you for the opportunity to appear before you today to make a statement concerning the USDA-APHIS budget and specifically the complete elimination of funding for the witchweed program in FY 1987. It is my hope that funding for this program will be restored and the funding level increased so that eradication can be accomplished.

Witchweed is a parasitic weed that attacks corn, sorghum, sugar cane, and many grassy weeds. It can reduce yields by 50 percent, doing its damage underground by attaching to the roots of host plants. It was first found in the United States in the eastern part of North Carolina in 1956 and subsequently infested 38 counties in North Carolina and South Carolina. Its only known occurrence in the western hemisphere is in the Carolinas, but witchweed is a threat to all corn-growing areas of the United States.

The federal government reacted to the discovery of this pest by establishing a quarantine in 1957. Since that time, USDA personnel have regulated the movement of commodities and machinery that can spread the pest. They keep survey records on every known infested field, and help to prevent witchweed from producing seed using techniques especially developed for witchweed.

The witchweed program has been extremely successful. The spread of the weed has been contained within the same general area of discovery and has been eliminated from thirteen of the thirty-eight previously-infested counties. Approximately 79 percent of the total area ever known to have been infested has been released from quarantine or should be within two years. This is significant progress.

Eradication of witchweed could be achieved in six years if sufficient funding was provided. The FY 1986 level of funding of $4.7 million provides for the continuation of an effective regulatory, survey, suppression, and eradication program. Survey and control activities are vital components of the program because certification of commodities is based on the determination that witchweed is below detectable levels in a given field. This assumes that the witchweed status of every field is known through visual survey and soil sampling. Some regulated commodities from infested areas can move if they are washed free of soil. Suppression and eradication activities are geared toward decreasing the amount of acreage infested and spot-treating new infestations to prevent spread. Other states have faith in the quality of the cooperative witchweed program in its present form. They have not established their own exterior quarantines and accept the farm-by-farm certification as presently established.

In spite of these successes, funding for the witchweed program has been dropped from the FY 1987 Federal Budget. It is felt that: (1) the pest is below economically damaging levels; or (2) the states have the capability to undertake effective actions without federal aid. However, these points are not valid. Economic damage has been reduced, but only by the use of USDA-developed control measures and containment activities. If USDA involvement is ended, we can expect an exponential increase in proliferation of the weed and to again observe economic damage. The growers and regulatory agencies of the infested states do not have the capability to undertake effective actions without federal aid.

The technology and techniques to eliminate witchweed are not adapted for use by growers. There is no practical approach to control based on resistant or tolerant varieties. Conventional herbicides applied in the usual ways at the usual times are totally ineffective against witchweed. It is not economicaly feasible for growers to obtain, maintain, or operate the equipment, chemicals, and methodology required to effectively contain witchweed. In addition, rented land accounts for very large percentage of farm acreage in the infested area. Herbicides that do prevent witchweed buildup do not provide protection to the current crop.. Because no protection, benefit, or profit is derived for the current year's crop, the renter will not spend money for applications. Few growers can spend money to control grassy weeds (hosts of witchweed) in non-host crops, noncropland, and idle fields.

The regulatory agencies of the states just do not have the funds nor the trained personnel to take over this job. Termination of USDA involvement in the witchweed program would be a regulatory nightmare for the infested states. If this were to happen, the Carolinas would be expected to assume responsibility for conducting a federally-mandated quarantine and certification program so that articles capable of moving the pest could be traded in national and international commerce (the quarantined commodities would include peanuts, sweet potatoes, Irish potatoes, nursery stock, cucumbers, watermelons, other vine crops, soybeans, corn, hay and peppers). The states would also have to regulate equipment sales yards, outdoor storage and shipping areas, and shipping containers such as bags, boxes and crates. Unless there were also survey and control activities, the witchweed status of individual fields would not be known, and as a result, regulated commodities could not be easily certified. Only those products, farm tools, and machinery that can be washed free of soil could move, assuming that personnel were available to certify the articles. Unless control was part of the program, witchweed would not be limited to a precise area as it has been. Spread would be inevitable.

USDA personnel are trained, in place, and currently handle all these activities. Again, the states just do not have the funds nor the trained personnel to take over this job. Without a solid, balanced program, non-infested states and foreign countries would probably establish exterior quarantines against commodities capable of spreading the pest. This could have disastrous effects on the Carolinas. In 1982, when the projected federal funding for the witchweed program for FY 1983 was also proposed to be totally eliminated, regulatory officials in non-infested states contacted those in the infested states asking what counties (not just farms) were infested. They were beginning the process of individual state quarantines against the pest. The value of regulated commodities in infested counties alone exceeds $550 million per year. As witchweed spreads, buffer areas beyond the presently-infested areas would be incorporated into exterior quarantine regulations established by non-infested states and countries. It would be only a matter of time before the bounds of the infested area could expand to other Carolina counties and then to the other parts of the United States.

Witchweed would begin to impact other areas of the U.S. The probability of long-range spread is much greater when seed is produced above ground, as would be the case with inadequate survey and control activities. If witchweed is detected in a field, it is estimated that it will take 3-5 years for it to totally infest the field, to achieve climax populations, and cause 50% yield reductions. Experts have estimated the rate of spread of witchweed to be exponential (that is, the area infested will double each year) without adequate control and quarantine activities.

In respect to direct effects on crops, witchweed is a threat to all corn-growing areas of the United States as it can thrive under the climatic conditions of the corn belt. The number of acres of corn, sorghum, and sugar cane in the United States that can potentially be infested with witchweed exceeds 80 million acres. These crops have an annual value in the U.S. of approximately $23 billion. Grower annual control costs could exceed $1.6 billion if a general infestation were to occur throughout the United States. One could still expect a 10% crop yield loss ($2.3 billion) even when available control practices are utilized because those available to growers at the present time are inadequate to do the job.

To avoid these disastrous consequences and keep on our timetable for eradication, we need to desperately resecure base funding for the program and the continuation of USDA involvement. However, if additional funding beyond this base could be obtained, eradication could proceed even more quickly with the present USDA personnel and technology as the basis. It is estimated that if this were to happen, all acreage could be released from quarantine by 1992. After that, the program would be one of survey with a decrease in control activity and a subsequent decrease in demands for funding. There has been approximately $99.3 million spent on witchweed since 1957. If the program is dropped now, all this effort will have been for nothing. $33 million more for eradication seems a small price to pay at this stage of the game (considering money already spent and the potential losses to growers when witchweed spreads).

The technology to suppress and eradicate witchweed exists. Substantial progress has been made in the last five years to achieve this goal. The state, federal and farmer participation structure is presently in place to implement an eradication plan. This progress can be continued with sufficient funding, and North Carolina and South Carolina can be rid of this pest in a relatively short period of time. The reduced level of funding proposed in the 1987 federal budget would allow witchweed plants to produce seed and spread to other areas of the United States.

To cut back on funding now would not be economically sound. It would be a giant step backward rather than just a delay in our fight against witchweed. We need desperately to resecure base funding for the program and the continuation of USDA involvement.

## STATEMENT OF FRANK E. SAMUEL, JR., PRESIDENT, HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

Mr. Chairman, I am Frank E. Samuel Jr., President of the Health Industry Manufacturers Association (HIMA), the trade association of the medical device and diagnostic products industry. Small companies comprise the bulk of our industry; two-thirds of HIMA'S 300 members have annual sales of less than $20 million.

Our industry's goal is to save and improve patients' lives. To do that, HIMA companies develop technologies -- from artificial organs to contact lenses -- that are often more akin to satellites than toasters, or even automobiles. For many devices, FDA requires a premarket approval, like that required for new drugs.

Patient care brings me here today because the Center for Devices and Radiological Health (CDRH) does not have sufficient resources to approve expeditiously the devices patients need.

I want to leave two points with the Committee:

- Despite progress under Commissioner Young's Action Plan, the resources proposed in the Administration's fiscal 1987 budget are insufficient to arrest a growing device lag. We believe the average length of device approvals could, in the near future, exceed the average length of drug approvals. An additional $5 million for CDRH -- about 1 percent of FDA's total budget -- could be a stitch in time. We ask that this $5 million for CDRH be used to fund 60 to 70 new people to work specifically on medical device and diagnostic product reviews.
- CDRH's resource shortage is not a mere budgetary abstraction. It has real consequences -- for the health of patients, for the incubation of tomorrow's advances, and for the competitiveness of the nation.

### Growing Device Lag

Drug approval delays help put the device lag in context. Commissioner Young has testified that the average length of a new drug approval is 24 months. He said that FDA, through steps in the immediate term, hopes to cut that average to 18 months.

The average length of a device premarket approval (PMA) is approaching 16 months -- a period that, based on 1982-86 data, will likely grow. If it does, the average length of a device approval could, in the near term, exceed the average length of a drug approval.

The trend is clearly toward lengthening product review times and substantial delays for the public. The attached table (Attachment I) shows that the number of days required by FDA to review and approve product submissions in all categories is increasing. Investigational Device Exemptions (IDE's) -- the first steps in the approval pipeline and harbingers of future PMA's -- are now the fastest growing component of CDRH's product approval workload. In FY 1980, FDA product approval staff spent 10% of their time on IDE's, in FY 1985, that had jumped to 25%.

## The Price of Delay

What this data cannot convey is the price -- in lives and safety -- that FDA delays exact from patients. Getting a new advance into the market is as important to the public health as getting a quack product off.

Last year, FDA announced approval of an implantable cardiac defibrillator, 19 months after the application was filed. This period was added on to the four years the defibrillator was tested under an IDE. When it was approved, Secretary Heckler estimated that 10,000 to 20,000 lives could be saved each year by use of the defibrillator. We believe those lives should and could have been saved earlier.

Other products that have life-saving and life-enhancing capabilities are taking much too long to get through the approval process. The Lincoff balloon catheter, a great improvement for eye procedures, took 20 months to get approved. The artificial knee and the artificial hip are devices which enable patients to resume normal lives with their families. The knee took 20 months to approve and the hip took 16 months.

Even very familiar products like contact lenses can take an extraordinarily long time to be approved. One rigid gas permeable lens, similar to three or four others already being marketed, has been pending in FDA for two and a half years and still has not been approved.

That sums up the problem. But what are the causes and what can be done?

Efficiency Gains

The first area that must be examined is agency efficiency. Our Association is never reticent about identifying opportunities for CDRH to realize efficiencies. Just last year, a task force of our Board studied the product approval process and made recommendations for streamlining it. The recommendations ranged from implementing a document tracking system to making specific regulatory reforms (such as eliminating unneeded legal review of scientific data). CDRH has acted on several of our recommendations and that, together with the Commissioner's Action Plan and CDRH management initiatives, has led to improvements in the approval process. (Attachment II summarizes the actions that have been taken.)

Steps to increase efficiency are a top priority and should continue. But they alone are not enough.

Declining Resources

To cut review periods significantly, we must address the ruthless arithmetic that underlies the device lag: more product applications, plus declining resources, equals longer product reviews.

CDRH's resources simply do not allow it to keep up with its workload. Since 1981, CDRH has lost over 70 full-time equivalents (FTE's). The current workforce for the Office of Device Evaluation is 180 FTE's, and CDRH estimates that on the order of 100 additional FTE's would be needed to cut review times significantly and reduce the PMA backlog. (See Attachment III.)

Personnel shifts within the agency cannot realistically produce the 100 FTE's needed. CDRH has already reassigned staff to product approvals, and that option is virtually exhausted. To draw personnel from other FDA functions could impede the agency's ability to deal with quack products and public health emergencies.

## Administration Budget

The Administration's FY 1987 budget does not make a serious attempt to address CDRH's resource shortage. The Administration budget assumes $69.4 million for CDRH, 1.3 percent more than the FY 1986 budget. FDA budget documents show that none of this modest increase would go for product approvals.

We are mindful that some agencies are being marked for outright extinction. Nonetheless, the stakes here are high, and the Administration's budget for CDRH is, at best, business as usual.

## Funding Request

We propose an additional $5 million in the FY 1987 budget for CDRH, to be used to fund 60 to 70 new people to do product reviews. These new people could help CDRH cut review periods and the backlog of applications. If with this money CDRH shows concrete progress, and continues to make efficiency gains, the Committee should consider FY 1988 funding for remaining personnel needs.

Our $5 million proposal represents about a 7 percent increase over the Administration's FY 1987 budget for CDRH and about a 1 percent increase over FDA's total budget. This proposal is reasonable, and there are good grounds for the Committee to approve it.

We would also point out that $11.4 million of FDA's budget request is assumed to come from funds that would be available only if new legislation were enacted. Should such required legislation not be approved by the Congress, FDA's current activities would be significantly underfunded, and this might affect CDRH. The Committee should keep this in mind in making FDA appropriations and assure that agency functions in CDRH are not affected by it.

## Real Issues

When we cut through the review periods and budget figures, the real value of an adequately funded CDRH comes down to things like these:

- Patient Care. It's not video games that are at stake. The issue is the health of patients, and we can't think of anything more important.
- Innovation. It's hard enough to marshal the people, money, and science to develop a product that may not be ready until the next decade. Add the prospect of open-ended delays at FDA, and the appetite of the innovator is less than whetted, especially for the small companies that make up the bulk of our industry. Delays are particularly threatening for device and diagnostics technologies, which, despite long development periods, can change so fast that patent terms are usually irrelevant. Finally, even if everything goes right, innovators face relatively small markets through which to recover their investments.
- Cost-Effectiveness. Health care is making an historic shift towards cost-effectiveness. But technologies can't participate in this revolution if they can't get out of FDA. It makes sense to encourage expeditious review of products like balloon catheters (which save Medicare about $10,000 for each bypass operation they replace) and new infusion technologies (which allow treatment in low-cost home settings).
- Global Competitiveness. Our industry is one of the few in the manufacturing sector that, overall, has a balance of trade surplus. But we slipped into a deficit with Japan two years ago, and have been running a consistent deficit with West Germany. (Attachment IV summarizes industry trade data.) "There is growing evidence that the United States is falling behind the world in the availability of innovative new products," concluded the President's Commission on Industrial Competitiveness. "[This] is a threat for biotechnology and medical devices." The nation should exploit its competitive strengths, not shoot itself in the foot.

HIMA urges the Committee to approve an additional $5 million appropriation to fund 60 to 70 new people in CDRH to do product reviews. We offer our assistance to the Committee and its staff on this matter.

[ATTACHMENT 1]

## PMA's
(Statutory deadline of 180 days)

| Fiscal Year | Days |
|---|---|
| 1982 | 294 ( 9.8 mo.) |
| 1983 | 329 (11.0 mo.) |
| 1984 | 470 (15.7 mo.) |
| 1985 | 372 (12.4 mo.) |
| 1986 (3 mo.) | 463 (15.4 mo.) |

## PMA Supplements

| | |
|---|---|
| 1984 | 140 ( 4.7 mo.) |
| 1985 | 240 ( 8.0 mo.) |
| 1986 (3 mo.) | not available |

## Investigational Device Exemptions (IDE's)
(Statutory deadline of 30 days)

| | |
|---|---|
| 1984 | 38 |
| 1985 | 37 |
| 1986 (3 mo.) | 47 |

## IDE Supplements

| | |
|---|---|
| 1984 | 45 |
| 1985 | 33 |
| 1986 (3 mo.) | 150 |

## 510k Premarket Notifications
(Statutory deadline of 90 days)

| | |
|---|---|
| 1984 | 70 |
| 1985 | 76 |
| 1986 (3 mo.) | 85 |

[ATTACHMENT II]

## IMPROVEMENTS IN THE PRODUCT APPROVAL PROCESS

Since October 1985, a substantial effort has been undertaken by the Center for Device and Radiological Health to reduce delays in FDA's product approval process for medical devices. These efforts respond not only to recommendations of the HIMA Device and Diagnostic Product Approval Task Force, but also to recommendations of the Center's Criticism Task Forces (internal CDRH groups established to make recommendations to the Center) and the Commissioner's Action Plan. A few of the most significant efforts are described below:

1. Improving the Information Flow. These changes include:
   - Establishing an automated document tracking system for PMAs, 510(k)s, and IDEs.
   - Hiring a consultant to recommend further improvements in information processing.
   - Exploring the possibility of getting outside support from an academic institution to improve information processing.
   - Finalizing plans for a system to permit electronic transmission of summaries of safety and effectiveness data.
2. Making the Ground Rules Clear. These developments include:
   - The receipt of nominations by HIMA for a HIMA fellowship to develop guidelines for PMAs, 510(k)s, and IDEs.
   - Meeting with FDA to discuss plans for the guideline fellowship.
   - HIMA has held several PMA workshops and plans to hold a seminar when FDA publishes its PMA regulation.
3. Building Regulatory Reforms. These developments include:
   - Removal of FDA's Office of General Counsel (with minor exceptions) from the PMA review process.
   - The establishment of a HIMA task force to make recommendations to FDA to streamline the PMA supplement and IDE review processes.
   - Office of Device Evaluation (ODE) has instituted a number of reforms, including completion of ODE review before a PMAA is submitted to an advisory review panel and issuance of guidelines for when a supplemental PMA is required to be submitted to an advisory review panel.
   - CDRH appears to be seriously considering use of its reclassification authority to reclassify several devices, including stainless steel sutures, magnetic resonance imagers, Yag lasers, automated differential cell counters, and infant radiant warmers.

[ATTACHMENT III]

### FDA BACKLOG*

### PMA APPLICATIONS

| Fiscal Year | Submissions | Decisions | Pending Submissions At End of Year |
|---|---|---|---|
| 1982 | 90 | 39 | 70 |
| 1983 | 76 | 50 | 81 |
| 1984 | 65 | 42 | 73 |
| 1985 | 97 | 37 | 103 |
| 1986 (6 mo.) | 37 | 33 | not yet available |

* These figures include only applications which are active at FDA, not those which have been sent back to sponsors for revisions.

[ATTACHMENT IV]

## U.S. Medical Technology's Declining Trade Position, 1983-1985

a. The U.S. device and diagnostics industry lost domestic market share to imports, and historical overall positve trade balance declined because export growth did not keep pace with imports:

| | U.S. World Trade 1983 ($M) | U.S. World Trade 1984 ($M) | U.S. World Trade 1985 ($M) | % Change 1984-1985 |
|---|---|---|---|---|
| Exports | 2,212 | 2,296 | 2,414 | 5.3 |
| Imports | 1,125 | 1,422 | 1,741 | 22.4 |
| Balance | 1,087 | 874 | 676 | -22.0 |

b. Japan and West Germany were principal competitors, and each increased their balance of trade with the U.S.:

| | U.S. Japan Trade 1983 ($M) | U.S. Japan Trade 1984 ($M) | U.S. Japan Trade 1985 ($M) | % Change 1984-1985 |
|---|---|---|---|---|
| Exports | 241 | 263 | 284 | 7.9 |
| Imports | 232 | 332 | 431 | 29.8 |
| Balance | 9 | -69 | -147 | -113.0 |

| | U.S. W.Germ. Trade 1983 ($M) | U.S. W.Germ. Trade 1984 ($M) | U.S. W.Germ. Trade 1985 ($M) | % Change 1984-1985 |
|---|---|---|---|---|
| Exports | 177 | 204 | 223 | 9.3 |
| Imports | 368 | 396 | 512 | 29.3 |
| Balance | -191 | -192 | -288 | -51.0 |

## STATEMENT OF RICHARD C. ELDEN, STATE ASSOCIATE, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

The International Association of Fish and Wildlife Agencies (IAFWA) is a quasi-governmental organization of public agencies which possess legal authority for protection and management of North America's fish and wildlife and their habitats. Founded in 1902, the Association's government members include the fish and wildlife agencies of all 50 states and most Canadian provinces, as well as the federal fish and wildlife agencies of the United States, Canada and Mexico. The Association has been a key organization in promoting principles of sound resource management and in strengthening federal, state and private cooperation in protecting and managing fish and wildlife in the public interest.

The state agency members of this Association strongly support the high priority given to implementing the conservation features of the Food Security Act of 1985 in both the ASCS and the SCS 1987 budgets. Further integration of conservation in the agricultural commodity program signals a positive response to needed changes to prevent and control soil erosion, potentially on more than a third of the nation's cropland, while simultaneously improving water quality, habitat for a variety of living resources, and providing for a sustainable agricultural base.

Careful consideration should be given to using Commodity Credit Corporation funds for the conservation reserve in years beyond the 1987 crop year.

The state members support continuation of funding of the Agriculture Conservation Program, Forestry Incentive Program and the Water Bank Program of the Agricultural Stabilization and Conservation Service at the 1986 funding level. Reorientation of the Agriculture Conservation Program within the past decade from strictly commodity production to combined conservation and commodity practices deserves continuing support. The Forestry Incentive Program is designed to assist small private landowners to improve forest management. This program is the only incentive small land owners have to properly develop and manage rather than mine this nation's valuable forest resource on over 278 million acres—which is 57% of the total forest land in the United States. The Water Bank Program should be continued until the swampbuster provision in the Food Security Act of 1986 is fully implemented.

The state fish and wildlife agency members of the Association support continuation of the four conservation programs in the Soil Conservation Service proposed FY 1987 budget: Conservation Technical Assistance at $286 million or more; Soil Surveys at $55 million or more; Snow Survey and water forecasting at $4 million or more; and Operation of Plant Materials Center at $4 million. These programs are basic to provide farm/ranch planning and for placing agricultural land use on a more sustainable basis. Conservation Technical Assistance and Soil Surveys are vital to implementing the Food Security Act of 1985. We question the elimination of the rural abandoned mine restoration program. Funds for this important program are transferred to the Soil Conservation Service from the Department of the Interior. Such funding should continue, if possible, to alleviate the landscape and water quality degrading situation associated with mined lands.

The state agency members of this Association recommend a funding level of $283.7 million for the Extension Service that will make it possible for that agency to sustain a renewable resource education program and assume a leadership role in implementation of the Food

Security Act; and restoration of funds for the Renewable Resources Extension Act to at least the 1986 level of $2,485,000.

The Administration proposal to reduce the Extension Service budget by 60% will greatly reduce the agency's ability to carry out its fundamental extension mission. Within that reduction, the funds for the Renewable Resources Extension Act are zeroed out. These funds that were added by the Congress to support the Renewable Resources Extension Act, go directly to the states, either to expand an existing fish and wildlife extension program or to initiate new programs. The funds have had a leveraging effect, stimulating contributions by the state and federal fish and wildlife agencies, and the land grant universities for fish and wildlife extension education. Elimination of the funds will dismantle the natural resources unit within the Federal Extension Service which was established following enactment of the Renewable Resources Education Act and will destroy the cooperative federal, state, county educational program for fish and wildlife resources. Additionally, it will weaken the role of extension education in implementing the Food Security Act, specifically those provisions relating to the conservation reserve, swampbuster, sodbuster, and other important provisions.

In the view of this Association, the stewardship and management of our resource base is essential to the Nation's defense. Natural resource management expenditures are investments for maintaining and perpetuating the economic well being and welfare of the Nation's citizens.

The member agencies of the Association are prepared to assist USDA agencies, particularly ASCS, SCS, Extension Service and the U.S. Forest Service, in developing plans and implementing programs called for in the Food Security Act of 1985. The considerable expertise available in the state fish and wildlife agencies can be instrumental in providing multiple benefits in the best public interest. We request that the Congress insure that cooperative efforts can take place.

## LETTER FROM KENT JONES, COMMISSIONER, NORTH DAKOTA DEPARTMENT OF AGRICULTURE

June 10, 1986

The Honorable Thad Cochran, Chairman
Senate Subcommittee on Agriculture
Attn: Irma Hanneson
Russell Office Bldg., Room 326
Washington, DC 20510

Dear Senator Cochran:

As North Dakota is historically the most agriculturally dependent state in the nation, I would like to request the implementation and an appropriation for Section 1440 of the current farm bill, for a pilot project in North Dakota dealing with "Special Grants for Financially Stressed and Dislocated Farmers".

These are very difficult times in agriculture. This pilot project could be very beneficial to our troubled farmers and could serve as an example and resource to other states who have agriculture problems. In North Dakota a farm credit counseling program was established and nationally recognized as innovative in state government by the Council of State Governments. North Dakota's counseling program has also served as a model for many other states in the nation. The pilot project would assist in adding more expertise to the current counseling program, and it would expand the program to reach more stressed farmers in the state. I feel our program here has done a great deal to avert the violence which many other states have experienced.

Enclosed is a program and budget for the pilot program, which has been developed with the assistance of Senator Mark Andrews. Please include it in the written record of public witness testimony for the appropriations to fiscal 1987 hearings held in early May.

Thank you for your consideration. Your support for this pilot project would be deeply appreciated.

Sincerely,

Kent Jones

Kent Jones
Commissioner

NORTH DAKOTA DEPARTMENT OF AGRICULTURE

### PILOT PROJECT

Special Grants for Financially Stressed
Farmers and Dislocated Farmers

Sec. 1440 of the Current Farm Bill

Priorities of needs identified in North Dakota:

ANNUAL BUDGET

| | |
|---|---|
| 1. To assist 50 dislocated farmers and/or farm wives to finish a four-year degree, to cover tuition and books only. | $100,000 |
| 2. To upgrade coverage of two hotlines; one a 24-hour hotline, seven days a week for emotionally stressed farmers; the second hotline deals with financially stressed farmers, handles an | |

| | | |
|---|---|---|
| | average of thirty calls per day. Together they reach over 3,000 people per year. The hotline personnel, including volunteers, need additional training and program assistance. | 40,000 |
| 3. | To upgrade and continue farm credit counselors' training programs that include, but are not limited to, the areas of finance, mental health, legal information, tax seminars, mediation, and communication skills. Counselors worked on a one-to-one basis with 1,498 people in a one-year period of time. The counselors need to be taught how to handle potential suicide threats, defuse threats of violence and contend with anti-government groups. | 30,000 |
| 4. | To establish a North Dakota networking system and training for the helping professions, both public and private, which deal with North Dakota farm and rural community people under financial and emotional stress. Approximately fifty professional and para-professional people in each of the eight districts will be trained. This training session will annually reach 400 people who will network throughout the state. They will concentrate on teaching people throughout the state how to prevent suicide, homicide and severe stress in the rural communities. | 50,000 |
| 5. | Develop a "cottage industry" mini-computer business to contract with government and private industry to service their needs. Train and equip ten financially-stressed farm women in cooperation with North Dakota Job Service JPTA Program. | 100,000 |
| 6. | Program administration, directed by the Commissioner of Agriculture of North Dakota, to assist financially stressed and dislocated farm people @ 8% of the budget. | 25,600 |
| | TOTAL: | 345,600 |

Needs and priorities were based on the third North Dakota farm credit counseling survey of clients by Dr. J. Patrick Smith, North Dakota Extension Service; Tom Lipetsky and Marion Peterson of the North Dakota Department of Agriculture; interviews with Myrt Armstrong, Executive Director, North Dakota Mental Health Association; James Schneider and Neil Fricke, North Dakota Job Service; Sam Ismir, North Dakota Department of Human Services; and Dr. J. Patrick Smith, Rural Socialogist, and Milan Christianson, Family Life Specialist, both of North Dakota Extension Service; and Dr. Roald Lund, Dean of Agriculture, North Dakota State University, Fargo, ND.

## STATEMENT OF THE MARCH OF DIMES BIRTH DEFECTS FOUNDATION

The March of Dimes Birth Defects Foundation hereby presents its position on the funding level for the Supplemental Food Program for Women, Infants and Children (WIC) and its potential impact on the health of American mothers and babies.

Good nutrition during pregnancy and entry into prenatal care, made available through WIC, contribute heavily to the birth of healthy children. This is vitally important to the March of Dimes as a national, non-profit voluntary health agency supported by private contributions whose purpose is to prevent birth defects. Comparatively small amounts of money invested in nutrition and basic health care for pregnant women prevent some birth defects and result in savings many times the original cost. The return on such an investment is at least a 300 percent savings on first-year hospital costs alone. Projected long-term savings are even greater, taking into account the benefits in reduced disabilities and higher productivity over the lifetimes of the parents and children involved.

More than 3.6 million babies will be born in our country this year. Eleven of every thousand of those babies will die before their first birthdays, most in their first month of life. Two-thirds of them will die as a result of low birthweight and prematurity, which are the leading causes of death for American babies under the age of one. Low-birthweight babies who survive are more likely to suffer in their mental and physical development. They are also more vulnerable to respiratory, heart, kidney or nervous system disorders which require lifetime care. Today, we know how to prevent many of the current cases of low birthweight and preterm delivery, and we could save many more of those babies from death or disability.

This year, about 250,000 babies will be born under the margin of safe weight: 5.5 pounds. Low birthweight is a primary reason that our overall infant death rate in the United States is worse than in 17 other countries. To put this in context, 30 years ago only six nations had lower infant death rates than the United States. Since then, other countries have made much more and much faster progress than we have.

WIC is one of the federal programs proven to help reduce the incidence of low birthweight. It is a unique food assistance program for our own citizens, appropriate in this country which is so abundant in food and able to feed so many other nations. WIC provides food, education and counseling that stress the importance of good nutrition during pregnancy. It has proven to be a highly successful, national conduit for bringing poor women into prenatal care, a vital element of having a healthy baby. WIC has improved the conditions of pregnancy for millions of American women and the children they bear.

The Administration's proposal for the FY '87 budget includes a shortfall of $15 million below what the budget projects as necessary to maintain current WIC services in FY '87. Currently, WIC only provides food and services to one third of the women, babies and children who qualify.

The March of Dimes supports funding WIC at least to maintain current services; we strongly recommend funding to extend WIC services to more of the mothers and children now eligible. At a time when several states are starting to make efforts to reduce infant deaths, including states with above-average death rates for babies, reducing the federal WIC commitment would be harmful to the health of mothers and children. This is especially true because so many states and local economies are suffering as market trends in oil, agriculture and other industries severely disrupt the living standards of many communities and families.

WIC is especially important in areas of the country with high rates of infant mortality and low birthweight. The Southern Governors Task Force on Infant Mortality has recommended federal, state and local initiatives to decrease the incidence of infant mortality. The March of Dimes is working on the Southern Regional Project to help achieve this goal.

A good example of state effort is Chairman Thad Cochran's home state of Mississippi. Mississippi is second only to this very District of Columbia in its high death rate for babies and the incidence of low weight at birth. This May, as part of the Southern Regional Project, the state will host a seminar of legislators, the business community, and voluntary organizations to work as partners to solve this statewide problem. This kind of state leadership must be supported through full funding of programs such as WIC.

What are the national benefits of investing in WIC services? The Harvard School of Public Health has reported that for every dollar spent in the prenatal care component alone of WIC, three dollars are saved in hospitalization costs for low-birthweight babies, because fewer babies are born in a condition to need newborn intensive hospital care. In 1984, at the request of the Senate Agriculture Committee, the General Accounting Office (GAO) studied WIC and found that participation in WIC correlates with a 16-20 percent decrease in the proportion of low-birthweight babies born to mothers who qualify for WIC assistance.

The U.S. Department of Agriculture evaluated WIC and concluded that its services significantly and positively affect the length of pregnancy and a child's weight at birth. WIC programs also increase early and regular use of prenatal care.

What are the consequences of not investing in care for pregnant women? What does high infant mortality cost the nation?

First -- the actual lives lost because of low birthweight, prematurity and other birth defects are only part of the picture. Before they die, those babies and their families undergo agonizing periods of intensive care, drastic resuscitation efforts, and last-resort medical treatment.

Second -- according to the latest report by the Institute of Medicine, this country spends more than $1.5 billion every year on only newborn intensive care, most of which is due to low birthweight.

Average medical costs for one normal delivery are already more than $3,000. If that baby is born too small or too soon, costs soar up at a dizzying rate -- ranging from several thousands to hundreds of thousands of dollars for one baby. You can grasp the exorbitant national costs when you remember that up to 7 percent of the 3.6 million babies born every year suffer low birthweight.

The American Journal of Obstetrics and Gynecology has just published a study of one community and its hospital's experience. One hundred women had received regular, basic prenatal care: periodic visits to a doctor, nutritional guidance and support, education, etc.. Another group of 100 women, matching the first group in socioeconomic standards, had delivered their babies without adequate prenatal care.

The babies whose mothers did not get care during pregnancy were more than six times as likely to be premature. They were four times as likely to weigh less than 5.5 lbs. -- the standard of safe weight. They were almost three times as likely to be placed in intensive care. The average costs of hospital care for babies who lacked adequate prenatal care were more than twice the costs of the other group. Even counting the cost of basic prenatal care, the average difference between babies in each group was $2,200 per birth.

The total? This one hospital spent almost $900,000 more every year on babies whose mothers did not get prenatal care than on babies whose mothers did. Those figures could be matched by hundreds of hospitals everywhere in this country, in every state and district.

That's a substantial loss. On the other side of the ledger, making sure that American women can get decent care while pregnant results in substantial savings and at least a three-fold return on our investment. WIC, the Supplemental Food Program, is a cornerstone of the small effort we currently make to invest in our future, in the person of the pregnant American woman and the child she bears.

The March of Dimes Birth Defects Foundation supports, at minimum, the funding of WIC with the $1.632 billion that will maintain current assistance to the one-third of eligible women and children it is now able to serve. Given the concern about reducing federal budget deficits throughout the decade, and the conviction that it is wrong to deprive the next generation of a sound future, both in finance and in good health, the March of Dimes recommends that Congress should:

* claim the large savings to be gained through preventive health care, especially good nutrition and access to prenatal care;

* make a comprehensive national commitment to reduce infant deaths and the incidence of low birthweight, part of which should include nutrition supplementation programs like WIC;

* and increase funds for the WIC program, which many studies have proven to be highly cost-effective, so that it may expand to reach at least 50 percent of the women and children currently eligible, many of whom are not now assisted.

Thank you.

## LETTER FROM NICHOLAS J. MELAS, PRESIDENT, METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

April 7, 1986

Honorable Thad Cochran
Chairman, Subcommittee on Agricultural,
Rural Development and Related Agencies
140 Senate Dirksen Building
Washington, DC 20510

Subject: Support for SCS Watershed Construction Program

Dear Chairman Cochran:

We were shocked and saddened to learn that the Administration's proposed budget for Fiscal Year 1987 calls for the total elimination of the Soil Conservation Service's watershed planning and operations. The Metropolitan Sanitary District of Greater Chicago (MSDGC) wishes to express its full support of the SCS Watershed Construction Program. In expressing this support, we are certain that we speak also on behalf of the many local governments, agencies and watershed steering committees in this area who have also been involved in the watershed program from its inception.

The MSDGC has been working with the SCS for the better part of the last 15 years on the development and construction of flood control structures for the various watersheds of the Chicago Metropolitan Area River Basin Plan. We have worked with the SCS in the preparation of the design, acted as the Local Sponsor responsible for land acquisition and acted as the Contracting Local Organization for the administration of many of the flood control contracts which were completed or are now under construction. We are in fact so committed to the overall program that we have, to date, spent $21,700,000 for land rights, which includes the purchase of land for projects remaining to be constructed. We want to emphasize that the projects completed or under construction have an average annual damage reduction benefit of $1,733,000, and provide flood protection to 3,666 residential units and 126 businesses. Those projects remaining to be constructed have an average annual damage reduction benefit of $9,418,000, and will provide flood protection to 6,897 residences and 224 businesses.

Great progress has been accomplished in providing flood protection to this critical urban area through the cooperative effort of the Federal-Local teamwork displayed by our two agencies. The MSDGC certainly wants this work to continue until all the flood protection measures of the entire Chicago Metropolitan Area River Basin Plan are accomplished. In this regard, it is essential that the SCS Watershed Construction Program be continued for Fiscal Year 1987.

Very truly yours,

Nicholas J. Melas
President

## STATEMENT OF THE ALABAMA POULTRY AND EGG ASSOCIATION, ET AL.

Alabama Poultry & Egg Association
Arkansas Poultry Federation
Delmarva Poultry Industry, Inc.
Florida Poultry Federation
Georgia Poultry Federation
Kentucky Poultry Federation
Mississippi Poultry Association
National Broiler Council
National Turkey Federation
North Carolina Poultry Federation
Pennsylvania Poultry Federation
Poultry Industries of Louisiana, Inc.
Southeastern Poultry & Egg Association
Tennessee Egg & Poultry Association
Texas Poultry Federation
United Egg Producers
Virginia Poultry Federation

RE: THE NEED FOR ADDITIONAL POULTRY DISEASE RESEARCH CONDUCTED IN A HIGH CONTAINMENT FACILITY

For many years avian influenza has been a relatively mild disease of turkeys in many parts of the United States. In 1983, avian influenza (AI) virus gained access to the chicken industry and had a devastating effect. Losses included $66 million for an eradication program and incalculable losses to poultry producers, feed suppliers, and other areas of agribusinesses associated with the poultry industry. The outbreak of this disease in the poultry industry had a major impact on export losses of farm commodities.

In 1985 there was a re-occurrence of AI in five Northeastern States. As a result of concerted efforts by state agencies, APHIS, and the poultry industry, this outbreak now appears to be under control. The poultry industry still faces the threat of AI, and as recently as late April virus isolations were made from two live dealer flocks in Ohio and New Jersey. Within the past few weeks, the presence of AI virus was confirmed in specialty birds in Oregon.

The last major national outbreak of Newcastle disease was in 1972. This outbreak cost the federal government $56 million for eradication. Industry losses from this disease outbreak were similar to losses incurred by the poultry industry as a result of the avian influenza outbreaks. Reintroduction of exotic Newcastle disease occurs through smuggling of exotic birds into the extensive U.S. pet bird market channels.

Both Newcastle and avian influenza are a continuing serious threat to the U.S. poultry industry. At this time there is an outbreak of exotic Newcastle disease in parrots in New Jersey. The distributor of these parrots has shipped exotic birds to a dozen states. Costs to the federal government for eradication of these two diseases has exceeded $100 million in the past 12 years.

This figure does not include the millions of dollars of losses suffered by the poultry industry.

The poultry industry needs research to utilize emerging technologies to develop more rapid and sensitive procedures to isolate and identify the viruses to their antibodies. Alternative approaches to slaughtering needs to be explored for the successful eradication and control of the diseases. Novel vaccine approaches and anti-viral therapy must be examined as possible alternatives. Of critical importance is the need to develop precise biochemical techniques to define the potential disease-causing capability of a virus. For example, we must be able to separate with great precision high pathogenic viruses from low pathogenic viruses. The hazard posed by infected and recovered flocks needs to be precisely defined. A critical need is to develop a regimen of avian influenza control that would allow the broiler industry to function and remain profitable in an environment contaminated with an avian influenza virus.

The poultry industry needs the Agricultural Research Service (ARS) to continue research on both of these diseases. Although ARS has been highly responsive to the needs of the poultry industry, it has only one laboratory conducting research on exotic poultry diesases. In order to do research on avian influenza, ARS had to stop the research on Newcastle disease because research cannot be done on both of these diseases in the same laboratory. If there is any "mixing" of the viruses, there is the risk of getting a new type of hybird virus containing properties of both Newcastle and avian influenza.

The Agricultural Research Service's Southeast Poultry Research Laboratory has the specialized facilities required to raise and house disease-free chcken flocks for use in this research. This facility has the required chemistry laboratories, specialized laboratory equipment, and other requirements needed to support a high containment operation. The fact is, however, that the 12-year-old building is tco small and can only accommodate one exotic disease at a time. Unfortunately the poultry industry currently faces threats from two exotic and costly diseases.

A high containment facility is an absolute necessity for research on these two viruses without endangering the poultry industry. Because of the danger to the poultry industry, the Animal and Plant Health Inspection Service (APHIS) does not permit these type viruses to be used in any facility that does not meet high containment requirements. The industy fully supports these APHIS regulations. A high containment facility is one that is constructed and operated so that the viruses cannot escape from the facility.

For many years ARS' poultry disease research group has done an outstanding job of providing research to help poultry and egg producers. We know ARS has the scientific expertise to do research on both exotic Newcastle and avian influenza. Both diseases are serious threats to the poultry and egg industry, each having the potential to deal devastating blows, especially in high density poultry producing areas. We are told by ARS that an additional high containment facility is necessary in order for the agency to conduct a continuing research program on both AI and VVND. The cost of such a facility is estimated to be about $2.5 million.

The poultry and egg industry feels there is an urgent need for additional research on AI and VVND. If this can only be accomplished through the construction of an additional high containment facility, we respectfully urge Congress to recognize the seriousness and danger of these diseases to the U.S. poultry industry and appropriate the necessary funds.

## STATEMENT OF THE NATIONAL CATTLEMEN'S ASSOCIATION

The National Cattlemen's Association is the national spokesman for all segments of the nation's beef cattle industry--including cattle breeders, producers, and feeders. The NCA represents approximately 230,000 professional cattlemen throughout the country. Membership includes individual members as well as 51 affiliated state cattle associations and 18 affiliated national breed organizations.

### INTRODUCTION

The National Cattlemen's Association firmly supports efforts by Congress and the Administration to reduce Federal spending. The long-term success of agriculture and most other industries is at stake. The Federal government competes with private sources for capital and inevitably raises the cost of doing business.

In the comments that follow, the nation's cattlemen clearly indicate that they are willing to take cuts in government programs conducted in part for their benefit. We believe that this can be done without harm to our industry or to the public provided that the programs and services of the highest priority be kept intact and those of low priority be deleted or reduced.

By and large, our comments pertain to the budget for the United States Department of Agriculture.

### RESEARCH AND EDUCATION

#### A. Agricultural Research Service (ARS)

NCA supports the proposed budget increases for ARS of $35 million. While keeping with its basic research mission, ARS has been very responsive to the research needs of industry, including the cattle industry.

ARS continues to operate in over 130 locations in this country and abroad. This number of locations is excessive and leads to inefficiency. Certain ARS locations are held together by tradition and political support. We urge Congress to seek the advice of ARS administrators and agricultural producers to identify those ARS locations which should be closed and/or merged with more substantial ARS facilities. In these situations, the facilities lack a "critical mass" of scientists to function productively. Savings from such reorganization could be applied to high priority research needs.

While we remain supportive of ARS due to their general responsiveness to industry and the efforts to streamline administrative procedures, we nevertheless are extremely disappointed that the appropriation of funds to animal science is continually substantially less than similar appropriations to plant science. Farm income from the sale of animals is approximately equal to income from the sale of plant products. Yet plant research receives more than double the amount of support from ARS. This is an inequality that cannot be allowed to continue. It has never been explained to our satisfaction why this disparity exists.

If funds for plant science are to be increased disproportionately compared to animal science, then ARS should at least place additional emphasis on range plant research - an area of research that has been neglected. Research on the basic physiology and morphology of range plants is needed.

#### B. Cooperative State Research Service (CSRS)

As in the proposed budget for ARS, the proposed budget for CSRS illustrates an inequality between animal and plant science. In this case, FY'86 funding for plant sciences was three fold higher than for animal science and, to add insult to injury, the proposed increase in funding for FY'87 is nine-fold higher for plant sciences than for animal science. Animal agriculture is not receiving the attention it deserves. We request the Congress direct CSRS to develop a logical and satisfactory explanation of this inequity.

Furthermore, the only sources of funding for animal health research (a combination of special grants and sec. 1433 funds) has again been deleted by the Administration. This has become an annual event. Meanwhile, animal health researchers are left in limbo, not knowing from year to year if their research efforts will be supported. This is an especially poor time to discourage long-term investigation into complex disease processes that represent the next frontier in animal health research. A long term and reliable source of funding is desperately needed. Until it is established, funding for animal health research through CSRS must be restored.

C. Extension Service (ES)

The Agricultural Extension Service has served a critical role in the development of American agriculture, and ES can continue to play a critical role if some rather drastic changes are made. Agriculture has become much more sophisticated with a greater reliance on technology. The National Cattlemen's Association agrees with the findings of the Office of Technology Assesment (OTA) report entitled "Technology, Public Policy and the Changing Structure of American Agriculture". The report clearly illustrated the changes that are occurring in agriculture and the changes that will necessarily occur in the future. Greater emphasis will be placed on technology management and information management. If the Extension Service is to secure continued support from the National Cattlemen's Association, it must adapt to these changing needs.

In order to facilitate innovation on the part of the extension service, we recommend the development of a competitive grant program as a means to restore some funding to the extension service that has been deleted by the Adminstration. This would serve to stimulate the more ambitious and innovative extension groups to cooperate in the development of a genuine plan that addresses the real needs of contemporary agriculture. NCA is not prepared to recommend a specific amount of money to be placed in a competitive grant program, but we encourage Congress to consider this as an alternative.

## FEDERAL AGRICULTURE COMMODITY PROGRAMS

A. Grains Programs

The National Cattlemen's Association has adopted policy to reduce the role of the federal government in agriculture commodity programs. NCA opposes artificially tampering with the price of basic feed grains. The cattle industry is the single largest user of feed grains and artificial prices for grain adversely impacts on our ability to compete in the market place. NCA does not have a cheap grain policy. We welcome higher agricultural commodity prices, but we emphasize that increases should be a result of market influences.

B. Dairy

As with feed grains, the NCA is actively opposed to dairy programs which adversely impact on the free market of the beef industry. NCA is strongly against the use of $1.1 billion of tax payers money being used to send dairy cattle to slaughter, as in the case of the existing whole-herd buyout. We recommend that the Appropriations Committee actively question any such future subsidy to slaughter programs.

## INTERNATIONAL PROGRAMS

### Foreign Agricultural Service

The activities of the Foreign Agricultural Service are some of the most important and productive of all programs in the USDA. We commend the FAS for its willingness to work with the private sector in helping to devlop new markets overseas for agricultural products.

The cooperator program is a real success story. The NCA believes the availability of funds for the cooperator programs be high priority within the USDA budget.

Exports are absolutely necessary. The NCA believes the FAS should give added emphasis to high-value and value added products such as beef.

The U.S. Meat Export Federation is the major livestock cooperator representing the red meat industry in pursuing new and expanded markets for red meat. The MEF is utilizing its cooperator funds very efficiently.

## SOIL AND WATER CONSERVATION PROGRAMS

Hold FY'86 levels on Great Plains Conservation Program, Agricultural Conservation Program and Small watershed Program. Vital to conserving soil and water in light of 1985 farm legislation for Conservation Acreage Program.

## FOREST SERVICE

### Forest Service Rangelands

Hold FY'86 budget line.

## SMALL COMMUNITY AND RURAL DEVELOPMENT

NCA is generally supportive of the USDA budget outline for programs under this area. Particularly:

1. NCA supports the continued movement of funds in the Farmers Home Administration (FmHA) programs from direct loans to loan guarantees. The guarantee plan should encourage private lenders to work actively with borrowers to restructure loans.

2. NCA supports converting the Federal Crop Insurance Corporation over to a re-insurer of private insurance companies.

3. NCA supports and encourages the use of the interest buydown program which works hand-in-hand with the loan guarantee program.

## MARKETING AND INSPECTION PROGRAMS

### A. User Fees

The President's budget proposes the implementation of user fees in several program areas to cover the costs of these programs.

The NCA has established policy that opposes user fees for programs that are mandated by law for the public benefit.

The proposed user fees for meat inspection is a perfect example of the kind NCA opposes.

In addition to our basic opposition to meat inspection user fees, we object to the FSIS proposal to charge $3.40 per head slaughtered. The FSIS believes this assessment will be passed through the system. We believe this fee will be unfairly passed back, not forward, to the cattle producer.

Other user fees proposals must be evaluated on their individual merit.

B. APHIS

The NCA is in general support of the APHIS budget proposal. There are a couple of areas, however, where we have some concerns.

The Administration proposes to keep funds for the Brucellosis eradication program at about the same level as previous years. We believe the agency should have ample discretionary authority to distribute these funds to where they will do the most good to carry out and accomplish the objectives and goals of the program.

We do, however, object to the use of indemnity funds being used in infected herds that are participants of the whole-herd buyout plan of dairy provisions in the 1985 farm bill. Funding priorities indicate that these funds could be better used in other Brucellosis program areas.

The NCA does support spending cuts in APHIS programs. However, many of the activities undertaken by APHIS are done by necessity and often on an emergency basis. It is not easy to plan or budget for such activities.

We believe there should be a contingency fund. This fund would be available for exotic or other disease outbreaks or other unforeseen emergencies.

## STATEMENT OF DON BUTLER, PRESIDENT, NATIONAL CATTLEMEN'S ASSOCIATION

Last week in Lubbock, Texas, Federal District Judge Halbert O. Woodward issued a preliminary injunction and order instructing USDA to implement provisions by June 1 that minimize the impact of the dairy whole-herd buyout program on the beef cattle market. The order was issued as a result of a law suit filed by the National Cattlemen's Association, affiliated associations and individual cattlemen. Since Monday, a team of cattle industry representatives has been meeting with USDA officials and legal counsel to expedite the development of those provisions before the June 1 deadline.

I am pleased to announce that we reached agreement today on language that essentially satisfies our requests submitted to the court last week. Those requests focused on three areas: (1) orderly marketing, (2) reporting and (3) beef purchasing.

The court order mandates orderly marketing without breaking existing contracts with dairymen. So, in order to reduce the bunching of dairy cattle in the first five months of the program, USDA agreed to ask dairymen to voluntarily move the scheduled slaughter of their cattle from the first marketing period to the second or third period. USDA will also impose severe penalties on dairymen who fail to meet disposal period deadlines.

Much of the volatility of the beef market since the implementation of the whole-herd buyout on April 1 can be attributed to uncertainty. No one knows how many of the 1.5 million dairy cattle in the program have already been slaughtered or exported, and no on knows when to expect more dairy cattle to come to market. If this uncertainty is removed, cattlemen can plan ahead to avoid peak dairy marketing periods.

In response to this concern, USDA agreed to survey program participants by May 15 in order to determine the number of dairy cattle already slaughtered and exported, as well as the anticipated disposal by month of the remaining cattle. Furthermore, USDA will start publishing weekly reports on the actual number of program dairy cattle slaughtered and exported, as well as the amount of red meat purchased by USDA. These reports will also contain the aggregate data collected to date.

USDA also agreed to make its required purchases of 400 million additional pounds of red meat proportionate to the additional cattle going to market under the program. And the department agreed to take steps to avoid displacing normal meat purchases. Recipient agencies will be encouraged to limit their acquisitions to domestically produced beef. USDA also agreed to expedite the export of live dairy cattle under the program.

We regret that we were forced to go to court to win these provisions. The dairy whole-herd buyout is a clear example of the folly of government subsidy programs and the havoc wreaked when government interferes in free markets.

The beef cattle industry has been irreparably damaged by the Dairy Termination Program. We cannot and will not tolerate future government programs that damage the beef cattle industry while supporting another commodity.

# STATEMENT OF THE NATIONAL COOPERATIVE BUSINESS ASSOCIATION

## AGRICULTURAL COOPERATIVE SERVICE

The National Cooperative Business Association supports a budget for the Agricultural Cooperative Service (ACS) which will maintain its current level of activities without the imposition of user fees.

The ACS has been providing development and technical assistance, research, education, training and statistics to U.S. agricultural cooperatives dating back to 1926.

Originally, cooperatives were formed in order to create competition which helped lower food prices for the consumer or to facilitate bulk purchases of supplies at reasonable prices. Cooperatives helped to enhance the producer's economic position.

Today, over 5,000 agricultural cooperatives serve four million producers. Business volume for farmer cooperatives increased eight-fold from 1950 to 1983 (from $8 billion to $67 billion). Cooperatives' share of the total farm market has risen to 33%. With these increases, research and information is needed on issues that are unique to cooperative businesses such as patronage refunds, control, membership, equity redemption, mergers and acquisitions.

Today, only five percent of U.S. agricultural cooperatives make over $25 million in business volume. The other ninety-five percent cannot afford to hire experts to conduct research on strengthening their cooperative operations though the smaller cooperatives particularly, need this type of assistance.

If for example, a fee is charged for assistance on a feasibility study of a new cooperative, such a fee is probably financially prohibitive for those persons trying to organize the cooperative. They are left with the options of not conducting such a study, risking financial disaster due to poor planning or not forming the cooperative.

Today, in such financially-troubled times, agricultural producers and their cooperatives cannot shoulder additional economic burdens. User fees are simply not the answer.

During the last two years the Agricultural Cooperative Service has completed 67 technical assistance projects involving 94 cooperatives of which 47 projects were for new cooperatives in the following commodities areas: grain, soybeans, cotton, strawberries, peanuts, vegetables, beef, dairy and farm supplies. This is in addition to 85 active research projects along with the on-going publication of the most comprehensive information on cooperatives.

Former secretary of agriculture John Block called cooperatives "one of the most important self-help vehicles for improving the farm economy."

The National Cooperative Business Association believes now is not the time to do away with an excellent program that is worth its small budget in gold.

# STATEMENT OF THE NATIONAL COTTON COUNCIL

## SUMMARY OF REQUESTS

| | |
|---|---|
| USDA-EXTENSION: | Extension formula program: Restore to $240 million |
| | Extension pest management program: Restore $1.55 million for earmarked funds for boll weevil management program and add $200,000 for additional states with weevil problem. Total requested for Extension's pest management program $7.73 million. |
| | Extension pesticide impact assessment program: Restore $1.72 million. |
| USDA-CSRS: | Restore CSRS budgets including Hatch formula, competitive and special grants to $288.7 million. |
| USDA-APHIS: | Add $650,000 for federal share of Carolinas boll weevil eradication program containment and buffer zone maintenance. |
| | Restore $1.1 million for 1987 efforts for the Western boll weevil eradication program. |
| | Restore proposed $200,000 cut in Texas High Plains boll weevil containment program to level of $900,000. |
| | Restore $1.3 million for support of cooperative federal/state pink bollworm program to $2.3 million. |

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The National Cotton Council is the central organization of the U. S. cotton industry, representing growers, ginners, warehousemen, cottonseed crushers, merchants, cooperatives and manufacturers from California to the Carolinas.

At the Council's annual meeting in February, the 297 delegates selected by 90 separate state, regional and national organizations strongly endorsed expanded agricultural research and education programs. In a unanimous resolution, they expressed continuing support for "...appropriations for cotton and cottonseed research and extension programs conducted by USDA and Cotton Belt states -- including ginning and other processing — that provide for efficient program growth to adequate levels, recognizing that such action is not inflationary and will produce public benefits far in excess of its costs."

We vigorously support a balanced reduction in the federal deficit. However, we recognize that agriculture cannot accomplish this task alone, or even a major part of it. But, we are willing to do our part because reducing the federal deficit is the surest way to continue to bring the dollar into a more favorable relationship with other currencies and make us more competitive in world markets.

Another pressing issue interrelated with the deficit and improved competitiveness is public investment in research and extension. We feel that maintaining an adequate research and extension budget for agriculture is a competitive necessity and represents a sound national investment that will pay dividends far in excess of its cost.

Recognizing the need to reduce government spending, we have reluctantly accepted a no-growth budget for agricultural research and extension for several years. This was done with the expectation that funding for essential projects would be provided in the future. However, we are compelled to recommend several adjustments in USDA's proposed FY 1987 budget.

## Extension

Extension Service programs are proposed to be cut 59%. This untimely reduction comes in the midst of a survival crisis for agriculture when the need for extension support is great. Formula funds for states are proposed to be cut substantially and critical special programs are to be eliminated completely. We urge restoring formula funds to the 1986 appropriated level of $240 million.

With elimination of the special extension programs, funds for the highly important extension pest management programs are thus cut. Within that program we are requesting $1.75 million for earmarked funds for boll weevil management. This includes $1.55 million for 11 boll weevil states currently receiving earmarked funds for boll weevil management and $200,000 for additional states which are now infested with the weevil but were not originally named in the program. We therefore request funding for earmarked funds of $7.73 million for the total extension integrated management program.

Also eliminated from Extension's budget were funds for pesticide impact assessment. The continued evaluation of agricultural chemicals under the pesticide impact assessment program is essential to agricultural productivity, profitability, farm safety and protection of the environment. We ask restoration of $1.72 million for this program to the 1986 appropriated level.

## Agricultural Research Service

The Agricultural Research Service (ARS) is proposed to receive a 2.6% increase over the 1986 appropriations. We appreciate the slight increase for the Department's in-house research agency, even though it is considerably below the proposed 16% total increase for other federal research and development obligations. We feel strongly that agricultural research should receive a higher priority for funding than it is now getting.

## Cooperative States Research Service

The Cooperative States Research Service (CSRS) plays a vital role in bringing together state agricultural experiment stations, industry and the federal government to form the ideal partnership to provide answers to America's agricultural problems.

The CSRS budget is slated for a decrease of 15% from the 1986 appropriations. Though Hatch formula funds are proposed to receive level funding, special grants were completely eliminated. Special grants programs include such efforts as research for National Integrated Pest Management and support of the Pesticide Impact Assessment Program. With the elimination of the special grants, the primary burden of supporting these important programs will be shifted to states and funds from Hatch Act appropriations. Nearly all special grants programs, though they may be conducted at a single state location, are regional and national in scope and are in the nation's interest. We therefore request full restoration of CSRS budgets, including Hatch, competitive and special grants to at least the 1986 appropriated level of $288.7 million.

## Animal and Plant Health Inspection Service

Council delegates also endorsed continuation and expansion, where appropriate, of pest management and eradication programs administered by the Animal and Plant Health Inspection Service (APHIS).

With regard to APHIS programs, farmers in North and South Carolina are highly pleased with progress toward eliminating the weevil in their states. Weevil numbers have been virtually eliminated except for the buffer area, a zone in which, by definition of its function, weevils are expected to migrate from adjacent infested states.

This boll weevil effort is an outstanding example of cooperative programs among federal and state research, APHIS' action programs, cooperative extension, industry, state regulatory agencies and farmers. The program has demonstrated that areawide suppression and eradication programs are indeed effective in reducing farmer's costs and are thus in the nation's interest.

No funds were requested in APHIS' proposed budget for federal share of maintaining the containment and buffer area. We therefore request $650,000 to cover a 30% cost share of this phase of the Carolinas' boll weevil eradication program.

Growers in Georgia, Alabama and Florida have expressed high interest in expanding the boll weevil eradication program to their states. Alabama has passed a referendum in which a two-thirds majority of affected growers voting requested the boll weevil eradication effort be conducted in their state. Georgia growers are planning a referendum this spring and growers in Florida are also laying groundwork for their participation. Upon grower approval, action will be taken for a start-up in Georgia, Alabama and Florida for early 1987. An additional $8.85 million will be needed in 1987 to cover the government's 30% cost share of this program.

With the increasing threat of the weevil in California and Arizona, a boll weevil eradication program was implemented in the spring of 1985 for parts of Arizona, Southern California and Northwestern Mexico. No money for support of this program was proposed in the Administration's budget for 1987. Funding of $1.1 million is needed for continuation of efforts in the Western states.

The weevil program in the Texas High Plains is a joint USDA and farmer effort established in 1964 to keep the weevil from becoming established in that area. It is an ongoing program and is highly successful with farmers investing heavily to keep the weevils out. The proposed $200,000 cut in this program needs to be restored to the 1986 appropriated level of $900,000.

The FY 1986 budget proposal includes a cut which would eliminate most of the cooperative federal-state quarantine program and other pink bollworm program activities. The cooperative federal-state program has worked well for many years and APHIS' role in it is essential. The proposed $1.3 million cut in this vital program should be restored to bring the total APHIS support for this program to the 1986 appropriated level of $2.3 million.

## STATEMENT OF ABBEY S. MEYERS, EXECUTIVE DIRECTOR, NATIONAL ORGANIZATION FOR RARE DISORDERS

Mr. Chairman, Members of the Committee, we are grateful for the opportunity to express our concerns about FY87 appropriations for FDA's Orphan Drug Grant program. As you know, FDA is mandated by the Orphan Drug Act of 1983 (PL97-414) and its ammendments (PL99-91) to establish an Office for Orphan Products Development which oversees development of "drugs of little commercial value" (orphan drugs). These therapies would not otherwise be developed by the pharmaceutical industry because they have little potential for profit.

We are very concerned about implementation of the Orphan Drug Act which authorizes $4 million per year for scientific research grants to academic scientists developing new orphan products. The law is 3½ years old. It can be credited with development of several major breakthrough therapies, and yet the full $4 million authorized by the Act has not yet been appropriated. We urge you to consider the needs of 20 million Americans with more than 5,000 rare, chronic and debilitating disorders who ask for only $4 million out of America's huge annual budget so that their pain will be alleviated, their lives lengthened and their families will stay intact.

Last year, Senator Howard Metzenbaum asked the Senate to ammend it's FY87 Agriculture appropriation so that the full $4 million authorization would be met. We thank this subcommittee for agreeing to this amount, but when the Bill reached the Conference Committee the sum was reduced to $3 million, and subsequently the Gramm-Rudman-Hollings legislation reduced that amount by a disproportionate 4.9% (instead of 4.3%). As a result, this year FDA will have only $2.854 million for Orphan Drug Research Grants despite the intense need of millions of Americans who will suffer and die in the absence of adequate funding.

FDA received 100 letters of intent from researchers seeking FY86 funding. Most of those proposals hold the promise of major medical breakthroughs for untreatable diseases. If all grants could be funded, the total needed would be $10 million. Despite this, the Administration has asked for $3.5 million for FY87 research grants, and $1.5 million for FDA's administrative costs, for a total request of $5 million. No doubt Gramm-Rudman-Hollings will reduce this amount and FDA will be left with hardly $3 million again next year for this sorely needed grant program. We fully understand the need for fiscal restraint and we have been patient since 1983 when the Orphan Drug Act became law. But his year we find it difficult to accept the same reasoning because too many lives continue to be lost, and too much intense suffering continues to be endured by patients who rely upon this tiny budget item.

Let me tell you just some of the impact of the therapies being developed **now** with funds you appropriated in previous years:

Autism: At the beginning of this decade 98% of adults with autism were institutionalized. Today, the orphan drug Fenfluramine, is being studied for effectiveness on autistic individuals with funding from FDA's office for Orphan Products Development. Preliminary reports indicate that this drug may be effective in up to 25% of autistic people, allowing them to relate to their environment, interact with other people, and offering hope that at least some people with this hopeless developmental disability may be able to live independent and productive lives outside of institutions. There are approximately 100,000 autistic people in America, and for the first time there is reason to hope that society may not have to pay the costs of institutionalization (ranging between $80,000 and $100,000 yearly) for perhaps 25,000 of these people. This new hope is directly related to the funds you appropriated in previous years for Orphan Drug Research Grants.

Narcolepsy: This severely disabling neurological disorder, which causes people to suddenly fall asleep without any warning, affects

200,000 Americans. Until now, the only treatments available were habit-forming amphetamines. Under the Orphan Drug Grant Program a new therapy, Gammahydrozybutyrate, known to control narcolepsy for several years in Canada (**without** side affects), is being studied in the U.S.A., with great promise. How many people with narcolepsy will be able to discontinue disability benefits when this drug is approved by the FDA, and how much money will society save (not to mention human suffering) when they become employed?

AIDS: It may be hard to believe as a consequence of all the publicity about AIDS, that this disorder is an orphan disease affecting only 16,000 Americans. There would be no potential for profit to any manufacturer wishing to develop a treatment for AIDS, although many companies are working feverishly to develop more profitable screening tests for AIDS. FDA funded **two** grants from FY86 funding in support of new AIDS treatments. Rock Hudson did not have to go to France; he could have gotten those drugs here!

Other Research funded from your FY86 appropriation include new treatments for cystic fibrosis, chronic hepatitis, Charcot-Marie Tooth Disease (presently untreatable), childhood lead poisoning, respiratory distress syndrome in infants, sickle cell anemia, a vaccine for Q Fever (an infectious disease affecting people who work with sheep), and many more. How can our Nation afford **not** to fund this research?

We beg this Committee to appropriate $5.5 million to FDA for its FY87 Orphan Product Development Program. We ask you to specifically state that $4 million of that sum should be **reserved for Research Grant** awards to scientists studying new treatments (drugs, devices and/or biologics) for Orphan Diseases, and $1.5 million should be used for associated administrative costs.

As you consider the very serious fiscal problems affecting our Nation today, please be aware that people with Orphan Diseases are ordinary citizens who have the same concerns about the national debt as you do. We are asking for only $½ million more than the President requested. If we were asking for $100 million dollars or a billion dollars, you would have every reason to consider us just another special interest group. But we ask for so little in comparison to the huge national budget, and every dollar you appropriate for this program means the difference between life and death to many Americans.

There are no contractors reaping profits from these grants. 100% of every dollar you appropriate for Orphan Drug Research goes directly to the scientists performing these investigations. Our lives depend upon this tiny budget line item, and future generations of people with hereditary orphan diseases hang in the balance of your Committee reports.

We remain keenly aware that literally no orphan drug research would have been performed were it not for this Committee. We thank you for the lives you've saved and we ask you to give the gift of life to others who rely upon your compassionate response to our suffering. Unfortunately, there are still many orphan drugs in need of development which must be supported through government funds because pharmaceutical manufacturers are still unwilling to underwrite costs of clinical trials.

Thank you.

## STATEMENT OF THE NATIONAL PEACH COUNCIL

### BACKGROUND

National Peach Council is a nationwide non-profit association representing peach producers and persons in allied industry.

Peaches are grown commercially in 32 states. The first six states in peach production in a normal year are California, South Carolina, Georgia, New Jersey, Pennsylvania and North Carolina. Peaches are a very important component of the American diet because they are an excellent source of vitamins, low in calories (38), high in fiber and contain no sodium or fat. Fresh peaches are the number one summer fruit and are available May through September. In a normal crop year, 3 billion pounds of peaches are produced and valued at approximately $360 million. Peaches have experienced crop losses in four out of five years due to early spring freezes, and experienced tree losses due to winter injury caused by severe winter temperatures. This is not only a economic loss to a grower but also a loss of a nutritional product to the American consumer.

USDA/Agriculture Research Service has been diligently working on these problems that cause production losses. The fresh peach industry is very appreciative of appropriations provided to USDA/ARS that have enabled them to do research in the areas of development of winter-hardy varieties and rootstocks, frost and freeze protection, and the other factors that influence winter-hardiness of peaches. It has been found that winter injury is a major factor in the peach tree short life problem experienced in the southeast.

This on going, long term research gives the peach industry the ray of hope that someday, hopefully by the first part of the 21st century, the ability to survive the devastating spring frosts and winter kill will be realized. The network used to disseminate research-based information to the growers and provide the instruction on how to practically apply research results to their particular situation is the USDA Cooperative Extension Service.

### THE PROBLEM

It has been proposed by President Reagen to cut federal funds for Cooperative Extension Service for Fiscal Year 1987, by 59% and to cut out all federally funded special research grants to the land grant colleges.

We feel these cuts are illogical, in that the Cooperative Extension Service (CES) is the only network with the capacity to gather and disseminate research-based information to every county in the United States. Without adequate federal support, the nationwide character of this service would surely change.

### EFFECTS ON THE PEACH INDUSTRY

With a severe 59% cut across the board, it will cause viable programs and extension employees to be terminated. In some states, such as North Carolina which has only one tree fruit specialist, the loss of such a person would be devastating. There would be insufficient support staff for the education and transfer of research information to commercial peach growers. North Carolina's Agricultural Extension Service will experience a reduction of $6,946,326 or 54% of the current 1986 budget if Congress accepts the President's FY 1987 budget.

Federal funds reduction in South Carolina, the 2nd largest commercial shipper of fresh peaches, could cause the loss of 160-170 positions - 60 in regular extension programs, 110 in special funding programs including Integrated Pest Management (IPM). Research has shown that extension results produce impacts of $10 for each $1 spent on extension efforts. "Peach Short Life," a federally funded project through Clemson University is a very important research project that has been going on for six years. This research explores the reasons so many peach trees die out when only 5-7 years old. "Peach Tree Short Life" is a continuing threat to the health of the southeastern peach industry. Now is not the time to cut a project that has just begun to show results.

A $6.5 million proposed extension cut in "the peach state," Georgia, would mean a loss of 480 extension positions. It is estimated 100-150 of these positions directly involve the peach industry.

Special federally funded research projects such as "Peach Tree Short Life" and "Integrated Pest Management" are vital to the future of the peach industry. Any loss of ability of the Extension Serivce to transmit research generated technology at a time when agricultural producers are experiencing serious fiscal problems could cause serious negative implications for rural communities.

We have only given examples of effects of three of the 32 peach states, but the proposed budget cuts will seriously effect every peach state.

## REQUEST

In view of the drastic consequences that could be fall the fresh peach industry, National Peach Council requests restoration of all federal extension funds for FY 1987 for agriculture, and continued funding for special state research projects for FY 1987.

## SUMMARY

We are not asking for increased funding for USDA/ARS, increased funding for Cooperative Extension Service, or increased funding for state federally funded research projects. We commend the administration for these efforts to reduce federal spending and our concern is not with the Gramm-Rudman cuts. Our concern is that the proposed reduction of extension funds is coming at a time when the peach industry needs educational assistance and technology transfer more than ever. Most of the eastern peach growing states suffered severe losses due to weather and economic difficulties in 4 of the last 5 years. Some growers are having severe financial problems and some forced farm sales are occuring. Technology transfer is a high priority of OMB and the administration. Yet, ironically, the budget proposes to cut the most effective technology transfer system we have ever known. Therefore, we ask that these severe reductions in funds for the USDA/Cooperative Extension Service for FY 1987 be seriously reconsidered.

## IMPACT OF PROPOSED FEDERAL FISCAL YEAR 1987 BUDGET CUTS ON

## CLEMSON/SOUTH CAROLINA EXTENSION SERVICE

1. The peach industry in South Carolina has had an extremely difficult time, suffering severe losses due to weather and economic difficulties in 4 of the last 5 years. Some growers are having severe financial problems. They produce a perennial

crop and cannot make many annual adjustments. Some forced farm sales are already occuring.

2. Service to the peach industry is a high priority of extension but any overall reduction in funds will adversely affect our ability to respond and provide leadership since agents and specialists will be spread even more thin.

3. Extension has provided major leadership in: "Peach Short Life," 10-point educational program; CUFAN - computer information at work; CUMAP - financial management assistance program; Quality Assessment Program - a cooperative program with industry and government to market quality fruit by grading; Fruit Harvest and Postharvest Technology. Extension assists with a state program that requires destruction of unmanaged trees and orchards to prevent disease spread.

4. "Peach Short Life," a federally funded project through Clemson University, directly affects service to the peach industry.

5. Federal funds reduction could cause the loss of 160-170 positions in South Carolina -- 60 in regular extension programs, 110 in special funding programs, including IPM. This represents an 18-20% reduction in programs. Research has shown that extension results produce impacts of about $10 for each $1 spent on extension efforts.

6. The proposed reduction of funds is coming at a time when the peach industry needs educational assistance and technology transfer more than ever. Technology transfer is a high priority of OMB and the administration. Yet, ironically, the budget proposes to cut the most effective technology transfer system we have ever known.

Prepared by Elwyn E. Deal, Assistant Director of Extension for
Agriculture and Natural Resources
Clemson University
Clemson, South Carolina

## Projected Impact of '87 Proposed Executive Budget on the North Carolina Agricultural Extension Service

The Executive Budget submitted by President Reagan to Congress reduces the federal funding of the Cooperative Extension Service by 59% from $342.7 million in 1986 to $140 million in 1987. This will mean a reduction in funding for the North Carolina Agricultural Extension Service of $6,946,326 or 54% of the current 1986 budget.

The budget requires congressional action through a hearing, budget and appropriation process. A resolution of the budget situation must be made before the start of the '87 fiscal year - October 1, 1986.

The budget, as proposed, would have the following effect on the North Carolina Agricultural Extension Service.

(1) It would require termination of the entire Expanded Food and Nutrition Education Program consisting of 39 specialists and agents and 146 nutrition aides who provide nutritional education to over 7,310 disadvantaged families representing 23,500 adults and 9,500 youth.

(2) It would seriously curtail or terminate Extension education programs in Integrated Pest Management, Farm Safety, Pesticide Impact Assessments, a program for Renewable Resources in forestry and wildlife, Rural Development Programs and the Small and Part-time Farmer Program.

(3) It would reduce the staff of the North Carolina Agricultural Extension Service by approximately 340 positions. A projection of possible terminations required by the reduction including the Expanded Food and Nutrition Program, is 60 specialists, 110 Extension Agents, 146 paraprofessionals and 27 technicians and secretaries.

(4) The ability of the Extension Service to transmit research generated technology would be reduced. At a time when agricultural producers are experiencing serious fiscal problems, the impairment or loss of any technology transfer has serious negative implications for rural communities.

(5) County Extension positions are cost-shared by county government. The loss of these positions could result in the loss of additional funding for the Extension Service. Currently, every federal dollar is matched by 2.5 state and county dollars in North Carolina.

(6) The ability of the Extension Service to recruit and train volunteer leaders for programs in Community and Rural Development, 4-H and Youth and Extension Home Economics would be significantly reduced. This would result in a reduction of services to these programs. Currently, Extension has over 10 hours of volunteer time given to education for every hour of professional staff time provided.

(7) The massive reductions in federal appropriations seriously jeopardize the national agency status of the Extension Service, a 70 year program of service to rural America. This could remove Extension as the USDA educational agency, negating a system of cooperation and coordination with other agencies and reduce the effectiveness of national programs for agriculture and rural communities.

(8) The reduction of a large number of staff including some tenured faculty would require the declaration of a fiscal exigency by the University. Funds would be required to meet unemployment payments and other termination costs.

## Letter From Senator Rockefeller

Ms. Lillie E. Hoover
National Peach Council
Post Office Box 1085
Martinsburg, West Virginia 25401

April 9, 1986

Dear Ms. Hoover:

Thank you for sharing with me your concerns for the future of the Cooperative Extension Service in West Virginia. I understand how very important this program is to our state. The West Virginia extension service is unique in its strong focus on rural leadership and community development and played an invaluable role in assisting farmers after the floods that devastated a major portion of the state last November.

The Reagan Administration's proposed 1987 budget called for the elimination of some key extension programs -- including the Expanded Food and Nutrition Education Program and an almost 50 percent reduction in general extension monies. According to Senate Budget Committee estimates, this could have resulted in the layoff of 8000 extension employees and closings of 1000 county extension offices nationwide. Further, with a projected $1.2 million shortfall for the West Virginia extension program, 50 staff positions are expected to be cut on the state level. Clearly, this could have devastating effects on a program that relies on a federal, state, and local partnership to keep it going.

Fortunately, the news for the extension service's future is brighter than previously thought. Congress rejected the President's budget proposal in March, and the Senate Budget Committee has drafted an alternative plan that does not make the drastic cuts in extension programs that the Administration had suggested. I am working hard to ensure that a viable extension service is preserved in our state. I have written to the President and Secretary of Agriculture Richard Lyng to express my strong opposition to the Administration's deep cuts in the extension service. While I cannot promise that the program will suffer no cuts at all -- almost all programs will bear some cuts -- I am hopeful that extension will be maintained at 1986 funding levels.

I am enclosing a copy of my letter to Secretary Lyng, as well as a copy of a recent edition of my weekly column, "Working for West Virginia," in which I further explain my support for the Cooperative Extension Service. I will continue to do everything I can at the federal level to ensure that adequate funding is provided. It's not just the large farmers that need our help -- the small family farmers and the rural communities need Congress' help too.

It's always good to hear from you, and I hope we can stay in touch on this situation. Please be assured that I am strongly committed to this program and to helping West Virginia's rural communities.

Sincerely,

John D. Rockefeller IV

# SAVING THE WV EXTENSION SERVICE

[A Weekly Commentary by Senator Jay Rockefeller]

At my recent Fayette County town meeting, a gentleman stood up and said, "Senator, our county extension agent may lose his job. Why is the Administration cutting way back on the Extension Service when it's been so helpful to us?"

Well, that constituent and I have a good deal in common. For the life of me I can't figure out why the Administration is trying to gut the U.S. Department of Agriculture's Extension Service – one of the federal government's best and most cost-effective programs.

The Administration argues that we can't afford the Extension Service. The gentleman from Oak Hill and I maintain that West Virginia can't afford to lose its state Extension Service – and thousands of West Virginians agree.

Just ask the farmers in our flood regions who received hay donations in time to save their herds a few months ago. Our extension agents arranged for farmers from neighboring states to donate 500 tons of hay feed to reach starving herds.

Or ask any of the hundreds of West Virginia farmers who have worked with extension agents to develop land reclamation plans for thousands of acres – they'll tell you how much they've relied on extension agents.

It's not just farmers who count on the Extension Service. Everyone from mayors to county commissioners to children in 4-H clubs look to county extension agents for leadership in the community.

Our state can't afford to lose that kind of leadership -- or the special expertise that extension agents offer.

Chopping 60 percent of its funding for general programs -- as the Reagan Administration's fiscal year '87 budget attempts to do -- would devastate the West Virginia Extension Service. As I told Secretary of Agriculture Richard Lyng in a recent letter, if the Administration gets its way, the days of county-based extension programs in our state would be over.

That would be a tragedy. Our Extension Service has not only been invaluable in enhancing farm production and management, but has been unique in its strong focus on rural leadership and community development.

In this era of Gramm-Rudman belt-tightening – which I support -- everyone has to sacrifice, including the Extension Service. But gutting a smart, cost-effective program is senseless.

I'm confident that my colleagues and I will win our fight to restore essential funding for the Extension Service. The farm belt isn't the only rural part of America that is hurting right now. Rural West Virginia is hurting, too -- and we need the special help that only the West Virginia Extension Service can provide.

## LETTER FROM SENATOR ROCKEFELLER

The Honorable Richard Lyng
Secretary of Agriculture
U.S. Department of Agriculture
14th & Independence Avenue, S.W.
Washington, D.C. 20250

March 17, 1986

Dear Mr. Secretary,

I am writing to let you know that I am strongly opposed to the Administration's proposed debilitating cuts in Cooperative Extension funding. I am well aware, as a Gramm-Rudman supporter, that some tough budgetary decisions will have to be made this year. I believe, however, that extension has been targetted for particularly harsh treatment in the Administration's fiscal year 1987 budget.

The proposed elimination of all earmarked extension programs, and the 59% cut in general formula programs, would devastate the West Virginia Extension Service. If the President's budget proposal were enacted, the days of county-based extension programs would be over in my state. While West Virginia has carried out traditional programs in farm production, management, and marketing, West Virginia's Extension Program has been unique in its strong focus on rural leadership and community development. Furthermore, my state's Extension Service performed an invaluable role in the recovery efforts after the November floods in West Virginia.

I urge you to abandon your plans to severely scale back the Extension Service. I know that the Department of Agriculture is currently faced with the growing problems of a national farm crisis. Many of the rural, non-farm areas of our country, however, are also confronting hard economic times. I would urge USDA not to lose sight of its obligation to help these rural areas. Extension Service is a leading example of a program that helps rural communities.

I hope that you will reconsider the proposed deep cuts in the Extension Service.

Sincerely,

Jay Rockefeller

John D. Rockefeller IV

# BUDGET CUTS THREATEN EXTENSION SERVICE

[From Fruit Grower, April 1986]

**By Gary Acuff**

CAN the Cooperative Extension Service survive a 59% cut in federal funding? That question, and the potential impact on farmers if the service didn't survive, are very real concerns in light of President Reagan's proposed fiscal year 1987 budget.

That budget calls for a 47% decrease in Smith-Lever 3b&c, the basic federal formula funds that provide the underpinnings for extension. In addition, programs funded under Smith-Lever 3d will be eliminated entirely. Integrated pest management, pesticide applicator certification, farm safety, farm financial management, and others fall in this category. The 100% reduction in these programs combined with the 47% decrease in the formula funds gives an overall reduction of 59%.

Not all Extension Service funding comes from the federal government. Typically, the federal share of total support is about a third, with the remainder coming primarily from state and county governments. But, that share varies widely with area and institution. In some cases the federal share is well over 40%.

If the proposed federal cuts are made as indicated — and that is a big if — the question then raised is whether states and counties will make up for the lost federal funding. The likelihood is that they will not, due to two key facts:

- The current federal support is in the form of matching funds. With matching funds state officials know that, up to a certain limit, when they allocate a dollar, the federal government provides a second dollar. If the federal matching funds aren't there, the incentive for states to provide money for extension is greatly reduced.
- Federal funding is also being cut on some big ticket items such as roads, which will put increased financial burdens on local and state governments.

## Gramm-Rudman Plays Role

The Gramm-Rudman-Hollings legislation to balance the federal budget is not directly responsible for the President's proposed reduction in federal support of extension. However, it does have a role to play.

Gramm-Rudman-Hollings dictates across-the-board cuts of equal percentage in all budget items under its jurisdiction when the deficit exceeds certain levels. One cut of 4.9% has already been mandated by this new law, with another reduction expected in the fall.

The proposed 59% reduction in extension funding, however, is far beyond anything directly required by Gramm-Rudman-Hollings. The reduction in extension is a selective cut that is being made while other budget items get minor reductions or are even increased.

Programs operated by or in cooperation with local or state governments were some of the hardest hit in the President's proposed budget. Some feel this reflects the President's desire to reduce the role of the federal government wherever possible and put more control back in the hands of local governments. Critics state that this is also a way of getting financial burdens off the back of the federal government by putting them on the states.

## Proposed Cuts Draw Fire

Whatever the rationale behind the proposed cuts in extension funding, they are being widely criticized by the agricultural community. "Shortsighted" is the phrase used to describe the proposed cuts by Dr. Dale Stansbury, director of agriculture and natural resources for the National Association of State Universities and Land-Grant Colleges. "For farmers and ranchers to regain their edge in fiercely competitive global markets, they must have new cost-saving production and management systems," he said. "Our science and education system must develop these systems and transfer them to working farms and farmers. We believe the President's proposal endangers our chances of doing this."

Paul Larsen, vice-president of extension and continuing education at Utah State University, pointed out that the land-grant university system and extension have been key elements in the success of U.S. agriculture for decades. He is concerned about who, if anyone, would pick up the activities extension would be forced to abandon if the cuts were enacted, and who growers could turn to for unbiased information.

Indeed, the proposed elimination of some extension programs seems to be at odds with other directives from Washington. Reducing pesticide usage and increasing regulation of pesticide use seem to be goals of the EPA, yet funds for IPM programs and pesticide applicator training are among those cut entirely from the extension budget. Likewise, the administration expresses concern about farmers going out of business, but extension programs for farm business management are slated to be axed.

Agricultural leaders are urging farmers to contact their congressmen and lobby for reinstating the Extension Service budget. The review process for the proposed budget has already begun, and is expected to continue for several months. □

## LETTER FROM TAMMY MEYER EXECUTIVE DIRECTOR, NORTH DAKOTA ASSOCIATION OF COOPERATIVES

May 12, 1986

Irma Hanneman
Majority Staff
Agriculture Appropriations Committee
140 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Ms. Hanneman:

On behalf of the North Dakota Association of Cooperatives' Board of Directors and member cooperatives, I would request this letter be put in the records for public comment concerning the FY 1987 Budget for the Agricultural Cooperative Service of the United States Department of Agriculture.

The Agricultural Cooperative Service has served the cooperative community well, as an independent agency with the Department of Agriculture. They are dedicated to providing the research and technical assistance cooperatives around the country need.

We are very concerned with the Administration's proposal to finance the research, education and technical assistance programs of the Agricultural Cooperative Service through user fees. This it totally inappropriate because of the severe economic stress and change agriculture is currently going through. Cooperatives, farmer-owned businesses, are only as healthy as their producer members. And with the farm economy being in the worst shape it has been in since the depression, cooperatives with the greatest need for technical assistance will be denied the help they need because of user fees.

Our association asks for the support of Congress to maintain the Agricultural Cooperative Service as a strong, viable and independent agency, and allow them to retain previous years funding levels (FY 1986 - $4.7 million), so they can provide the services cooperatives depend on them for.

Sincerely,

Tammy Meyer

Tammy Meyer
Executive Director

(Attached is a resolution passed by our member cooperatives at our last annual meeting.)

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NORTH DAKOTA ASSOCIATION OF COOPERATIVES
Fifth Annual Meeting
February 11 - 12, 1986

WHEREAS, the Agricultural Cooperative Service, USDA, provides valuable research and technical advisory services to North Dakota cooperatives,

BE IT RESOLVED that the North Dakota Association of Cooperatives encourage strong budget and manpower support for continuation of the program of work of the Agricultural Cooperative Service on behalf of the nation's farmer-owned cooperatives.

## STATEMENT OF GERALD J. MOSSINGHOFF, PRESIDENT, PHARMACEUTICAL MANUFACTURERS ASSOCIATION

The Pharmaceutical Manufacturers Association represents more than 100 research-intensive companies engaged in the discovery and development of new pharmaceutical products.

The new drugs developed by PMA member companies must be approved by the Food and Drug Administration before they can be marketed in this country. The FDA proposes, as part of its Fiscal Year 1987 budget request, to collect user fees from companies for reviewing and approving New Drug Applications (NDAs).

According to an FDA "Talk Paper" of February 5, 1986, the agency's budget request would include $424 million in appropriated funds and $26 million collected through product-approval fees charged for FDA review of NDAs. "Such fees have been proposed before but not implemented and would be largely directed to improving the drug approval process," the paper states.

At a hearing before the House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies on April 8, 1986, FDA Commissioner Frank E. Young said the agency is "developing a legislative proposal to authorize the collection of such charges for our review of new product applications, not under authority of the User Charge Act, but under specific statutory authority...We are fully cognizant of the Committee's past guidance on user charges, and that is why we are developing a new, separate legislative proposal, to allow for full legislative review of the issue."

This legislation has not yet been submitted to Congress, or otherwise been made available for review and comment. We believe it would be premature for the Congress to approve user fees until the accompanying legislation can be considered.

The President's budget anticipates that the first $11.4 million the FDA collects in user fees would be applied to support existing operations in the area of new-drug approvals. If legislation authorizing the collection of user fees is not enacted, therefore, there would be an actual reduction from current operations in new-drug approval activities. Therefore, PMA believes that the FDA's appropriation for FY 1987 should be increased by at least $11.4 million so the agency's current activities in approving new drugs can be sustained, whether or not user-fee legislation is approved. In fact, PMA believes that FDA's FY 1987 appropriation should be increased by more than $11.4 million to ensure that vital new-drug approval operations are enhanced, whether or not user-fee legislation is enacted.

At this time, PMA has very little hard information about the specifics of FDA's user-fee proposal. The remainder of this statement, therefore, will focus in a general way on user fees and will spell out the essential provisions that any user-fee legislation must contain.

The expeditious approval of new life-saving and cost-effective medicines by FDA is of critical importance to public health, and both the FDA and PMA are committed to streamlining the drug-approval process. To this end, PMA would support user fees if the fees were reasonable; specifically targeted to improving the drug-approval process; additive to FDA's regular funding, and part of a multi-year commitment to improve the drug-approval process.

The need for the timely approval of new drugs is vividly demonstrated by the delay in approving beta-blockers--an important class of cardiovascular drugs--in this country. The delay in the United States, in comparison with the earlier approval of these drugs by other developed countries with sophisticated drug-approval systems, caused unnecessary deaths, pain and suffering in this country.

Beta-blockers are widely recognized as one of the major therapeutic advances of the modern era. "It is now clear that beta-blockers are one of those infrequent advances that revolutionize the practice of medicine," Lawrence K. Altman wrote in The New York Times on February 2, 1982.

Beta-blockers were approved for the treatment of cardiac arrythmias in the United States in 1968, three years after they were approved for that use in the United Kingdom. They were approved for the treatment of angina in the United States in 1973, seven years after they were approved for that use in the United Kingdom. They were approved for the treatment of hypertension in the United States in 1976, seven years after they were approved for that use in the United Kingdom. And they were approved to reduce the risk of death for heart attack victims in the United States in 1981, six years after they were approved for that use in Sweden.

In announcing the approval of a beta-blocker to treat heart-attack victims in November 1981, Dr. Arthur Hull Hayes Jr., then FDA Commissioner, said that, as a result of the approval, 7,000 to 10,000 lives could be saved a year in the United States. Beta-blockers had been used to prevent second heart attacks in Sweden since 1975.

Delay in approving new drugs also undermines the incentive for developing them, as Henry Grabowski, Professor of Economics at Duke University, has pointed out, most recently in a speech in Washington on February 13, 1986. Generally, Grabowski noted, it takes more than 10 years for a new product to reach the market, at an average cost of $94 million. The average new drug needs 12 years of net revenue to break even at an 8 percent real interest rate, he said, and 19 years to break even at a 10 percent rate.

"Another basic finding of our research," Grabowski continued, "is that breakeven lifetimes are highly sensitive to regulatory delays. We found, for example, that if regulatory delays could be reduced by one year, the average breakeven time for new drug introductions would be reduced by three to four years. This striking result reflects the time value of money. In other words, given an interest rate of eight to ten percent, up front marketing delays and lost sales opportunities count for a lot more economically than additional revenues at the end of the product life cycle."

Under Commissioner Young, the FDA has intensified its efforts to streamline the drug-approval process--and significant progress has been made. In 1985, the agency approved a modern record of 30 New Molecular Entities (NMEs). However, a great deal remains to be done.

For example, in 1962 Congress established a 180-day statutory deadline for approving new drugs, but that deadline has been virtually ignored ever since. In recent years, the mean time required to approve NMEs has ranged between 28 and 39 months, with the mean about 32 months in 1985. For the most therapeutically important NMEs, the mean approval time more than doubled during 1982-1985, rising from 14.4 months to 29.5 months. In addition, the backlog for NMEs has grown by more than 80 percent since 1981.

To help the FDA improve the drug-approval process, PMA established a special Board-level Committee in July 1984 to work with the agency. The PMA Ad Hoc Committee on FDA Issues formed working groups that have focused on six major areas: electronic data transmission; agency-industry communications; more effective use by FDA of outside advisors; decentralization of some of FDA's functions; the FDA environment and facilities, and funding. Cooperation between the FDA and the working groups has been excellent.

Because the expeditious approval of safe and effective new drugs is important to public health and the research-based pharmaceutical industry, PMA would support empowering the FDA to impose user fees for processing NDAs under carefully-drawn guidelines. As I have said, the user fees would have to be reasonable; specifically targeted to improving the drug-approval process; additive to the FDA's regular funding, and part of a multi-year commitment to improving the drug-approval process. Under these criteria, a user-fee program would help to expedite the approval of new medicines to save lives, ease suffering and reduce health-care costs.

As information is not available at this time to enable the Subcommittee to determine just what the Administration's proposal entails, we urge that the Subcommittee prohibit the collection of user fees, until such time as authorizing legislation may be thoroughly considered and enacted. After that, we would, of course, be pleased to work closely with the Subcommittee on this matter.

## LETTER FROM PATRICK T. FERRARO, CHAIRMAN, BOARD OF DIRECTORS, SANTA CLARA VALLEY WATER DISTRICT

March 7, 1986

Dear Chairman Cochran:

The Santa Clara Valley Water District, sponsoring resource conservation districts, and local cities in Santa Clara County, are extremely concerned over continued proposals of the Administration to eliminate watershed planning and flood prevention programs of the U. S. Soil Conservation Service (SCS). We are strongly opposed to the proposals for elimination of these programs in the President's fiscal year 1987 budget and to the President's fiscal year 1986 recision request pending with Congress to freeze construction funding during the current fiscal year.

The ongoing P.L. 566 Small Watershed Program of SCS in Santa Clara County, California is vital, with respect to flood control and agriculture, and must continue to be assured. We simply cannot afford the immense financial burden and flood hazards which would otherwise result should such assistance be terminated.

The magnitude of our concerns can best be illustrated by the fact that, in this County alone, we are currently cost-sharing with SCS on over $30 million in flood control improvements which are under construction. Further, cost-sharing is anticipated on another $27 million in similar improvements which are now in various stages of planning or design.

It is our view that the Administration's proposals relative to SCS are perhaps shortsighted. Although we certainly support the goal of balanced budgets and a reduced deficit, we disagree with attempts to do so at the expense of such sound, low cost, long-term programs as those so effectively administered by SCS.

SCS has consistently attempted to minimize requested appropriations in efforts to help reduce overall federal spending while keeping its many cost-effective programs intact. However, the drastic cuts now proposed would essentially eliminate its role as one of the most effective water resources agencies (with one of the highest project construction to planning ratios) in the nation.

We, therefore, urge your strong opposition to the recision of already appropriated 1986 construction funds and the elimination of these important programs. We further urge your strong support for appropriations in fiscal year 1987 and thereafter that will ensure the Soil Conservation Service's very important and essential continuing role in conservation and resource protection nationwide.

Sincerely,

ORIGINAL SIGNED BY

Patrick T. Ferraro, Chairman
Board of Directors

## LETTER FROM EDWIN E. KETCHUM, PRESIDENT, SOUTHWEST ANIMAL HEALTH RESEARCH FOUNDATION

May 2, 1986

Honorable Thad Cochran
Chairman, Subcommittee on Agricultural, Rural
Development and Related Agencies
Room 140, Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Cochran,

This testimony is related to the screwworm program and the interest of the Southwest Animal Health Research Foundation (SWAHRF) to get proper funding to continue the elimination of the screwworm fly beyond the Isthmus of Tehuantepec to the Darian Gap of Southern Panama.

The SWAHRF is a non-profit organization of representatives of most of the livestock organizations in the Southwest and Mexico. SWAHRF trustees meet regularly with the joint U.S. and Mexico Commission for the eradication of the screwworm fly to monitor the progress of the screwworm fly eradication program; and the needs of the commissions as to funding and producer participation.

This testimony is based on information given to SWAHRF by APHIS in response to certain questions posed to them, and is reported in a similar context.

1. Why does the livestock industry seek to extend the screwworm eradication program to Panama?

Screwworm is one of the most devastating of all livestock pests. In my opinion, the cattle industry in the Southwest would have difficulty surviving the economic losses such as we had prior to the eradication program. Apart from the benefits that would be afforded the countries of Central America, the likelihood of reintroduction of screwworms into the United States would be greatly lessened with a sterile fly barrier at the Isthmus of Panama.

2. If we are funded at the $28 million level which was requested in the President's budget, what will this do to eradication efforts in the Yucatan Peninsula, Belize, and Guatemala?

Only a barrier program could be maintained at this level of funding.

3. What is the minimum amount of money you can maintain the barrier with and at the same time begin to eradicate the remaining areas of Mexico?

$31.589 million (the same as FY 1986).

4. How much will it cost to build the plant in Panama? Will it have sufficient fly production to also eradicate the Caribbean Islands? When would it be built?

$10-12 million.
Yes.
Architectural and engineering work will start in FY 1987, if funds are available.

5. Do we have any indications that the quarantine and dipping stations are more effective than last year?

Yes. Less outbreaks, more animals being detected with screwworm and being quarantined at the stations. However, no quarantine line can be 100 percent effective.

6. Are you keeping sufficient field inspectors in the north of Mexico to be sure that if we do have an outbreak it will be detected fairly soon?

Yes. We will reduce numbers but maintain sufficient to detect outbreaks.

7. What is the status of the Texas plant, and is the plant continuing to be maintained at the same level?

Personnel levels have been reduced to the minimum, but the plant is being maintained at the same level of readiness.

8. How would a screwworm outbreak in the United States be handled?

The agency maintains special task forces in each region to respond to animal health emergencies. In the event of a screwworm outbreak in the United States, the agency would activate the appropriate unit, and would begin the immediate importation of sterile flies from Mexico. If the outbreak occurred on a large scale, the agency would also establish quarantines on animal movement through exposed areas. In responding to the threat, the task force would draw on the technical expertise available in the Mexico program and elsewhere within the agency. The agency also has agreements with the military providing for additional support in such areas as maintaining quarantines or providing veterinarians in the event of an emergency.

Thank you for the opportunity to submit this testimony to your committee. We feel confident that you will be able to help us achieve the goal of the complete elimination of the screwworm fly.

Sincerely,

Edwin E. Ketchum
President,
Southwest Animal Health
Research Foundation
Route 4, Box 92
Duncan, OK 73533

## STATEMENT OF KARL M. BACKES, PRESIDENT, TEHACHAPI-CUMMINGS COUNTY WATER DISTRICT

My name is Karl M. Backes, and I am president of the Tehachapi-Cummings County Water District. With me today is Gene A. Lundquist, a director of the Kern County Water Agency. We are here before you today to urge your support for restoring Fiscal Year 86-87 funds in the Department of Agriculture's Soil Conservation Service programs. Our specific concern is the P.L. 566, or Small Watershed Act, programs, and the Tehachapi Watershed Project in Kern County, California.

In addition to the Tehachapi-Cummings County Water District and the Kern County Water Agency, Tehachapi Watershed Project sponsors include the Tehachapi Resource Conservation District and the City of Tehachapi. To date, these local sponsors and taxpayers have spent about $350,000 on the project, while the Federal Government has already spent $2.5 million. After work funded by the current fiscal year budget is finished, the Tehachapi project will be about one-third complete, with the Antelope Dam component of the project finished. The Fiscal Year 86-87 funds will be used for construction of flood channel and diversion facilities.

To stop this project at this point, as proposed in the President's Budget for Fiscal Year 86-87, would leave it partially completed and of absolutely no use or benefit to anybody. Worse, such an action would also literally throw away almost $3 million.

A $230 million allocation is needed to continue the Soil Conservation Service's nationwide watershed and flood prevention projects on schedule. To maintain construction schedules for Congressionally-authorized P.L. 566 projects in California that are already under construction, a $6 million allocation for Fiscal Year 86-87 is needed. Of that amount, $1.3 million is needed for the Antelope Channel and Diversion component of the Tehachapi Watershed Project. The Tehachapi Watershed Project has a strong benefit-to-cost ratio of 1.3 to 1, and is considered one of the top priority projects in the state by the California Soil Conservation Service office.

I would like to take this opportunity to express our appreciation for your long-time support of the Soil Conservation Service and its watershed protection programs. These projects have proven to be among the most beneficial and cost-effective in the nation, providing real service in areas of real need.

We urge your continued support for the national Soil Conservation Service watershed protection programs, and specifically to restore funding to at least complete those projects already under construction. If they are not completed, no benefit can be realized from the considerable local and federal expenditures that have already been made.

## STATEMENT OF MIKE WALLACE, EXECUTIVE DIRECTOR, TEXAS PEST MANAGEMENT ASSOCIATION

Mr. Chairman, my name is Mike Wallace I am the Executive Director of the Texas Pest Management Association (TPMA), a non-profit producer organization in Texas which runs the Integrated Pest Management (IPM) program for the state. We represent over 1,000 producers of cotton, grain sorghum, wheat, peanuts, citrus, alfalfa, corn, soybeans and sunflowers. We also represent 12 commodity organizations in the state of Texas. We have 21 producer units covering over 70 counties. The information developed by the Extension Agents-Pest Management in each one of these pest management unit areas reaches over 8,400 producers. Acreage in the counties covered by this information dissemination is approximately 10,125,000. IPM information is reaching a substantial number of producers across the state.

Agricultural producers in Texas use more than 21 million acres of land to produce the above commodities as well as pecans and rice. Cash receipts from the sale of these commodities exceed $3 billion each year. The management of weeds, insects, diseases and associated crop production practices represent major variable costs that limit profitability in Texas agriculture. Integrated Pest Management, a system that combines all crop production tactics, has proven to be the most profitable and effective approach to pest control.

In Texas there is a highly coordinated effort in the implementation of the IPM concept between the producers, organized by TPMA, the 12 commodity organizations, the Texas A&M University System including the Texas Agricultural Extension Service and Agricultural Experiment Station, the Texas Department of Agriculture, USDA and various regional universities around the state. One of the major keys to the success of our IPM program is the availability of qualified specialists, provided through the Texas Agricultural Extension Service, to assist the producer in interpretation of the field crop situations. The producer relies on this technical expertise.

Successful crop production depends upon the effective control of all crop enemies-weeds, nematodes, insects and disease. Control of these crop pests has become increasingly difficult due to: energy considerations; pest resistance to many pesticides; concern for the environment; the need to preserve beneficial insects; and above all-the rapidly escalating costs of pest control.

Emphasis has been placed upon the IPM approach to crop protection-to control each pest in a way that will be most conducive to the control of other pests, maximize net profit, and simultaneously create no adverse effects on the crop or the environment.

Crop protection has evolved from a purely chemical approach to one that integrates all possible control techniques including the use of naturally-existing control agents. These management tools include cultural control practices, biological control, variety selection and the judicious use of pesticides.

The precise timing and execution of each IPM operation is critical in reducing crop injury. Presently, the use of economic thresholds and field scouting are major keys to a successful IPM program.

IPM represents the most effective, the safest and most profitable approach to crop protection.

Economic thresholds change throughout the season depending on commodity prices. These thresholds cannot be established in a research facility and be applicable for all areas of the state, nor applicable over a period of years. On-site technical assistance is a critical element in the success of any Integrated Pest Management effort. IPM is a management strategy that requires continuous adjustment with local technical expertise for success.

As you know the President's budget for FY87 proposes to eliminate all Smith-Lever Section 3(d) Integrated Pest Management Funds. The current FY86 federal appropriation, of $7.486 million supports Extension Integrated Pest Management programs in all 50 states and in Guam, Puerto Rico and the Virgin Islands. It is vital to Texas producers that level funding for IPM Smith-Lever Section 3(d) be restored to the budget for FY87.

Producers need assistance in proper pest identification and monitoring techniques. Producers need assistance in the selection, use and evaluation of pest management methods that are effective and enhance the potential for a positive economic return. Texas agriculture needs well trained pest scouts to monitor pest occurance throughout the state. Agricultural pest control chemicals need to be used appropriately to maintain their effectiveness and to reduce unnecessary environmental disruption and degradation.

With Smith-Lever Section 3(d) funding, the Texas Agricultural Extension Service teaches pest identification skills and pest management action thresholds. They provide the vital technical guidance and support for pest monitoring activities in more than 70 counties. They establish, in cooperation with TPMA, method and result demonstrations of IPM tactics for producer evaluation. The IPM extension agents teach the appropriate use of resistant plants, cultural practices, agricultural chemicals and biological agents to control pests. They also use a variety of publications, newsletters and mass media techniques to provide information on occurrence of pests and appropriate management techniques.

The major educational objectives of the Extension and TPMA IPM Programs are to enhance the economic stability of producers and improve environmental quality and agricultural production efficiency through the adoption of integrated pest management tactics and principles. Extension agents for pest management use result demonstrations, scouting and other method demonstrations, tours, field days, meetings, electronic media, newsletters, publications and computer communications to encourage the adoption of IPM practices.

Texas producers pay their share of the IPM program. In 1985 Texas producers paid almost $400,000 in user fees for this program. In addition, the Texas Legislature appropriated almost $200,000 for IPM. We have also already taken our share of cuts in Texas IPM. Gramm-Rudman 1986 cuts amounted to 4.3% and as you are probably aware, the state of Texas currently has a $1.3 billion dollar shortfall and the Governor has issued an Executive Order for a 13% further reduction for each year of the biennium. As you can see, the State of Texas is not currently in a position to provide additional funding. Also, producers, under current economic conditions are not able to provide additional funding.

Integrated Pest Management works! Integrated Pest Management provides a return on investment to the producer and to the environment.

* Extension and TPMA IPM programs encouraging delayed uniform planting to suppress the boll weevil in the Rolling Plains has reduced insecticide costs and increased net profits an estimated $3.4 to 5.5 million per year.

* Use of IPM in pecans resulted in an average reduction in fungicide cost of $64.20/acre.

* Peanut producers using IPM practices have increased yields and net returns by $95.00/acre.

* Wheat producers have increased yields 15-40% and recognized a 2.5 to 1 return on dollars invested.

* Soybean producers using IPM practices increased net returns by $20/acre.

* Rio Grande Valley producers realized a net reduction of eight insecticide applications and achieved a savings of $48.00/acre.

* IPM program activities in the El Paso area saved cotton producers $750,000 and reduced five fold, the amount of insecticide required for pink bollworm control in 1985.

* Wheat producers using infurrow applications of phosphate fertilizer can reduce wheat seed costs by up to $9.00/acre without reducing yield potential.

* Texas Blackland cotton producers using IPM practices increased yields an average of 137 lbs./acre and received $46.42 more in net returns/acre.

* An IPM program initiative in fertility management demonstrated a 72 and 90 pound lint yield increase or $36 and $45/acre in dryland and irrigated cotton using $18/acre of potassium input.

* A Coastal Plains cotton IPM program helped reduce insecticide costs by $3.22/acre.

Mr. Chairman, members of the Committee, Texas producers are paying their fair share of IPM funding, the state of Texas is paying their share. We have taken our cuts, but we feel complete elimination of IPM funding under Smith-Lever Section 3(d) is unreasonable. We urge you to provide level funding for IPM for FY87. Thank you.

## LETTER FROM DAWN C. KRISTOF, PRESIDENT, WATER AND WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

The Honorable Thad Cochran
Chairman, Subcommittee on Agriculture,
Rural Development and Related Agencies
Committee on Appropriations
140 Dirksen Senate Office Building
Washington, D. C. 20510

May 21, 1986

Dear Senator Cochran:

WWEMA appreciates this opportunity to comment on the proposed budget for the Farmers Home Administration and particularly on the critically important water and waste disposal program.

WWEMA is a 77-year old organization of over 120 corporations that develop technology for and manufacture and supply equipment, materials and services to the water supply and water pollution control industries. Our plants, in nearly all 50 states, employ some 50,000 people.

Our comments will focus on the fiscal '87 budget for the Farmers Home Administration water and waste disposal program. This program provides communities in rural America with adequate drinking water sources and proper means for waste disposal to ensure that basic human needs are met.

While many communities have benefited substantially from assistance provided under this program, others face critical needs that cannot — and must not — be ignored. The growing threat of surface and groundwater contamination resulting from agricultural activities constitutes the most widespread cause of water quality problems from nonpoint sources. Detection of potentially toxic substances in our nation's drinking water heightens the need for remedial action to prevent further health hazards. Action is needed in all communities, regardless of population or financial capability.

The FmHA water and waste disposal program is designed solely to assist rural communities which are unable to obtain financing from other sources. These communities experience exceptional health and safety problems due to deteriorating water supply facilities or inadequate waste facilities. Today these needs amount to nearly one billion in applications-on-hand for FmHA loan and grant assistance.

Rural America is faced with the massive task of combating deteriorating potable water sources and providing adequate waste treatment to meet existing water quality requirements. WWEMA finds it inconceivable that funding for the FmHA water and waste disposal program would be eliminated, as proposed in the Administration's fiscal '86 budget.

Continued support at the current funding level of $340 million in loans and $115 million in grants is a minimum requirement for smaller communities to maintain a healthy and productive standard of living. Any further reductions will have a significant negative effect on housing, economic development, community development, jobs and environmental quality in rural America. Water supply and treatment capacity is an essential element in achieving each of these goals.

Another important factor that should not be overlooked is the Administration request to cease funding the EPA construction grants program, with drastic cutbacks in each of the next four years. With the 1988 compliance deadline for communities to meet secondary treatment requirements, states and municipalities will be forced to divert limited resources to financing wastewater treatment facilities. This drain on available state and local funds will further inhibit the ability of smaller communities to obtain financing for their water quality needs.

Further, the imminent passage of amendments to the Safe Drinking Water Act will require increased monitoring and treatment of public water supplies. The Environmental Protection Agency has stated that the majority of problems with potable water supplies in the country are found at small systems — those lease capable of implementing stringent new controls to protect the public health without the assistance of programs such as the rural water and waste disposal program. Under this new law, small systems will not be exempt from implementing filtration and disinfection requirements. They will not be exempt from increased monitoring requirements. They will not be exempt from programs to remove organic contaminants and human carcinogens from drinking water supplies. These new programs are costly, but necessary to protect America's health; and these new programs are soon to be federal law.

WWEMA urges the Subcommittee to maintain support for this program at a minimum funding level equal to the 1986 appropriation of $340 million for loans and $115 million for grants. Further reductions in the program will not only reverse progress achieved to date, but also result in fewer firms devoting their research dollars to developing new, cost-effective technologies to meet the special needs of small communities in managing their water resources.

WWEMA believes that with the Congress, FmHA and industry working together, we will be able to satisfy the future needs of rural America in providing improved water quality at a price that is consistent with the benefits. I would like to thank the Chairman and Members of this Subcommittee for allowing WWEMA to present its views.

Sincerely,

DAWN C. KRISTOF
President

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